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See page 36 for

the Right Advice







Snapshot Protecting Your Pride & Joy

Matthew Frost National Sales & Marketing Manager

One of my most vivid ARB memories was my second-round interview for a sales job in 1993 with a guy called Buddy King. Now semi-retired (we drag him out for the odd show and training night), Bud was an industry celebrity for four decades, holding a variety of positions at ARB in Australia and the US. Bud's approach to most things in life is quite unorthodox, including his interview technique. We spent the entire time in the workshop at the store Bud ran, looking over his new 80 Series LandCruiser. I actually didn't even realise I was being interviewed, thinking we were just killing time waiting for the National Sales Manager, Greg Milton, to turn up. Bud concluded our conversation by stating, "We'll be in touch," prompting a startled reply from me along the lines of "What about my interview with you and Greg?"

It turned out that conversation with Buddy in the workshop was my interview, with Greg never showing up but calling me later that day and offering me the job. I was so surprised about the manner in which I was recruited, I accepted the role without even confirming what I was going to get paid!

In addition to Bud's bizarre interview techniques, the other lasting memory of that day was his brand new LandCruiser 80 Series. It was a white GXL turbo diesel model and the workshop manager, Joe Amorosi (who is still with ARB), was just putting the finishing touches to fitting every single conceivable accessory to it. It was an absolutely magnificent vehicle and to say I drooled over it is an understatement. I was driving a shitbox old 4WD at the time and a fully kitted out new LandCruiser was a vehicle I totally aspired to getting my hands on one day.

I took my first step towards this goal when I got my first company car at ARB, a dual-cab HiLux, in 1997. Whilst not my dream car, it was a great 4x4 that served me very well for the next couple of years until things went seriously off the rails.



I had Discovery 3 and 4s for 13 years, travelling to places like the Simpson Desert, Corner Country and the High Country with the vehicles never missing a beat. In 1999, it was necessary for ARB to acquire a new Land Rover Discovery 2 in order to perform suspension development work. This process took a few months and on completion, it was decided to assign the vehicle to the company fleet. Nobody that was entitled to a company vehicle was putting their hand up for it so for no other reason than my British heritage, the vehicle was assigned to me.

Now this next part of the story will be impossible for anyone to understand unless they have owned a Land Rover. But despite the vehicle breaking down and the subsequent issues that saw it requiring replacement engines on two occasions in the few years ARB owned it, I found myself quite getting into Land Rovers. When it was necessary for ARB to acquire a facelift Discovery 2 in 2002 for product development, I was more than happy to transition into this model.

My second Discovery proved to be a much better vehicle but the tone had been set and for several years I was the butt of numerous Land Rover jokes at ARB. This all changed in 2004 when I went into a Discovery 3.

The Discovery 1 and 2 were built on the Range Rover platform that had been around since the 1970s but the 3 was an all-new model. It was an absolute quantum leap in 4x4 design and won countless awards internationally due to its impressive off road capabilities coupled with a level of refinement that was far superior to any other 4x4. The vehicle received a minor facelift a few years later and again I found myself at the wheel. By the time the Discovery 4 came out, the platform was an awesome package and even the diehard Toyota drivers at ARB were quite envious when I rocked up in one.

I had Discovery 3 and 4s for 13 years, travelling to places like the Simpson Desert, Corner Country and the High Country with the vehicles never missing a beat. Unlike my colleagues with LandCruisers and Patrols, as well as tackling any type of 4WD track, due to technologies like height adjustable suspension, I was also able to park in any underground car park in Melbourne when hitting the town on a Saturday night.

Land Rover genuinely achieved the ultimate balance between on and off performance with the Discovery 3/4 platform and even at the end of its model life in 2017, many of Australia's most distinguished 4x4 experts regarded it as the best off road vehicle on the market. When the Discovery 5 came out, I naturally started making noises around it being time to move on from my 4. However, the 5 is a very different vehicle again and a number of questions were raised by ARB, and indeed our competitors, about whether it was commercially viable to develop a range of accessories for it.

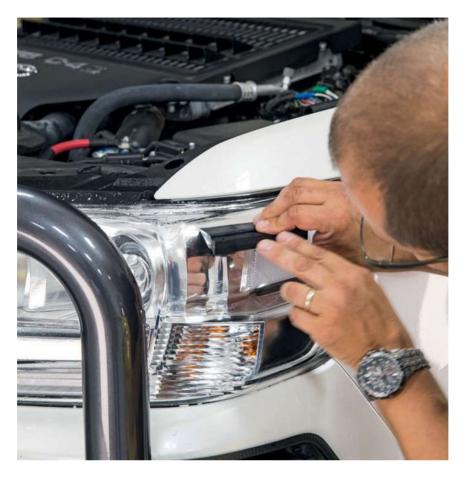
My fate was sealed when I raised the matter with ARB's Managing Director, Andy Brown, and he told me it was my call what off road vehicle I went into next but that we would not be building a bull bar for a Discovery 5 any time soon.

I've seen many times what happens to modern vehicles that are unfortunate enough to hit a kangaroo and with the amount of remote area touring I do, there was no way I was going to drive around in a vehicle that wasn't equipped with a bull bar.

So with the Defender discontinued and the Discovery 5 off the list, after 18 years, my time driving Land Rovers was drawing to a close.

With my 25th anniversary at ARB approaching, I've been thinking back quite nostalgically on those early years and my encounter with Buddy and his LandCruiser. So with Land Rover now off the menu, I ordered a LandCruiser 200.

Without wanting to appear ungrateful, when I picked up the vehicle on a Sunday morning, within a few minutes my wife and I looked at each other and thought... it ain't no Discovery. The car felt quite sluggish and truck-like compared to the Land Rover and



By the time the vehicle was built for its first outback trip, it was a totally different machine. the antiquated suspension system just didn't soak up the bumps like the cushions of air fitted to the Discovery. I consoled myself thinking... hey, it'll tow the boat well. My opinion of the vehicle changed dramatically a few weeks later though.

The big difference between the LandCruiser and Discovery is that the LandCruiser platform lends itself far better to modifications. There's room under the bonnet for accessories like a dual battery system, a huge range of suspension upgrade options and there is a much wider choice of off road tyres available. By the time the vehicle was built for its first outback trip, it was a totally different machine. The biggest transformation was the ride, subsequent to the fitment of the OME BP-51 suspension system. The dirt road performance was nothing short of mind blowing with load carrying and towing capabilities transformed. Touring and camping out of the vehicle was a far better experience and after my first trip, I was well and truly sold.

A new 4x4 decked out in accessories is a big investment and just like many of our customers, I like to look after my cars. This led me to start getting nervous when I looked at my calendar given the multiple 4x4 work trips I had coming up over the next few months.

I'd opted for a metallic pearl colour, which looks stunning but is not very forgiving when it comes to scratches. With a major High Country trip coming up on newly opened tracks that would no doubt be overgrown after winter, I was keen to explore ways to protect the paintwork on the car.

After a bit of research, I came to the conclusion that the best possible option for protecting the car, without detracting from its appearance, was to use a product called XPEL.

XPEL is a clear polyurethane film that when applied to the car is virtually invisible. In fact, I find it gives the paintwork a really rich lustre and actually improves the look. The company has computer-generated templates for vehicles like the 200, which means that once expertly applied, the fit is perfect. Of course, any type of film is only as good as the



installer and I was lucky that a local company, House of Tint, was a licensed installer. The owner of the business, Travis Lang, is known throughout the eastern suburbs of Melbourne as a real expert in the field of tint, wraps and vehicle graphics, so I was very confident in his ability to do a great job on the install.

"I'm amazed you guys drove up that track... I did \$8,000 in panel damage last time I came down it!"

The product's first test was a trip to the Victorian High Country that saw us travel along Blue Rag Range Track across to Dargo, Grant, Talbotville, Wonnangatta and then into Mansfield via the mountain cattlemen's huts. We had several vehicles on the trip that required some major cutting and polishing on our return but the LandCruiser didn't have a mark on it. I was absolutely stoked with the product, not realising that an extreme test was just a few weeks away.

Months earlier, Simon Christie and Danny Sparks-Cousins from the Your 4x4 TV show had approached me about joining them on a 4x4 trip to the north east region of Tasmania. Whilst the west coast of Tassie is renowned for challenging tracks, the east is associated with pristine beaches and rolling sand dunes, coupled with cheese, seafood and wineries. It sounded like a tame trip and a terrific opportunity to get the new 200 onto the TV show. I hadn't had the opportunity to get lockers fitted but after viewing the itinerary, I figured I wouldn't need them.

Boy, was I wrong. I won't attempt to describe the trip, as there'll be a whole series dedicated to it airing on 7mate this April, but in 10 years of running sponsor trips, the producers described it as the toughest yet. We were driving on tracks that hadn't seen any maintenance in years and experienced vehicle damage never before seen on any of our sponsor trips. I used my winch more times in just a few days than in 30 years of 4WDing.

One of the guys from ARB Hobart who joined us for the last day of the trip summarised our experience when he stated, "I'm amazed you guys drove up that track... I did \$8,000 in panel damage last time I came down it!"

I certainly questioned what I was doing driving a brand new vehicle on these tracks and can't remember how many times I said, "I wish I'd brought ARB's twin diff lock equipped 79 series," but given we'd travelled all this way to make a TV show, wussing out wasn't an option.

I just had to put my trust in the protection equipment fitted to my vehicle: Summit bull bar, side protection steps, under vehicle protection panels and the XPEL film. I hadn't had a chance to fit a rear bar, resulting in the factory bumper getting absolutely stuffed by the end of the trip.

Unlike several other vehicles, mine was fortunate enough to avoid any panel damage but it was impossible to ascertain what level of damage had been done to the paintwork given the car was covered in mud and dust. When I got back to Melbourne, I grabbed about \$30 in two dollar coins, headed to the carwash and prayed.

As the mud started to fall off, it was obvious to see the bull bar was badly scratched but not damaged. The side steps were scraped with rock damage but the sills were completely intact. The UVP had taken some hits but the engine sump, front diff housing, gearbox and transfer case were all untouched. All of the unprotected areas – roof rails, plastic window trims and even the snorkel – were all badly



All of the unprotected areas... were all badly scratched. But to my absolute amazement, the vehicle's paintwork was unmarked.



scratched. But to my absolute amazement, the vehicle's paintwork was unmarked.

There were some slight marks in the film that disappeared over the next few days in the Melbourne sun, as one of XPEL's characteristics is its self-healing properties when exposed to heat. A local detailer managed to restore the plastic trims but did nothing more than chamois the paintwork.

A couple of weeks later, I caught up with some of the other trip participants and they were equally amazed at how well my 200 had held up compared to the other vehicles. It's not often we highlight products we have no intention of selling. We sometimes struggle to put stickers on straight, let alone an entire vehicle film! But if you're after the ultimate protection for your 4x4, in addition to a full ARB protection system, an XPEL wrap is well worth checking out.



AKB Comper Mug

Www.akey juice, morning jolt, cuppa Joe, rocket fuel. Whatever you call it, there's nothing like waking up in the middle of the bush and brewing a fresh cup of coffee (or tea). Created from insulated stainless steel, the new ARB Camper Mug is double-walled to keep the heat from hot drinks in the cup and not on your hands. Holding a decent 350ml and branded with an etched ARB logo, this handy camper mug will go on every outdoor adventure you take!

RRP \$16.00



AKB Thermo Hosk

hether you fill it with coffee, soup or simply hot water, ARB's new Thermo Flask will ensure that your liquids will still be hot when you reach your destination. Made from stainless steel with a rubber coating on the outer, the ARB Thermo Flask is a non-spill car companion that can be used for hot or cold liquids. Holding 450ml, this flask keeps liquid hot for over six hours!

RRP \$19.00



ARB Off Roord Socks

RB's famous "socks in a can" have kept many travellers cosy and warm on chilly tracks. We've reinvented these camping companions, piffed the can and replaced it with an extra pair!

Dealing with cold, water-soaked socks while camping in the middle of winter is a recipe for an unhappy outdoor experience. Made from Australian Merino wool, which is known for its warmth in extreme temperatures and maximum breathability, these Off Road Socks ensure whatever situation you find yourself in, you'll always have a cosy pair of warm, dry socks on hand... and a spare!

Available in two sizes (M-L and L-XL), grab a pair today!

RRP \$29.00







suzu MU-X owners now have the option to completely transform the usable space in the back of their wagon. Keeping gear secure, safe, organised and accessible, ARB's Outback Solutions Modular Drawer Systems reduce redundant areas whilst providing increased storage.

Tailored for MU-X 2013 on models, a special low-profile side floor on the driver's side allows access to the OE jack compartment whilst a high-mounted side floor on the passenger side creates an additional storage compartment. The drawers are a perfect fit for the Isuzu MU-X, maximising storage volume and working in harmony with the second row seats. With the removal of the third row seats, the drawer installation utilises existing threads in the vehicle floor plan.

Long-lasting, UV stable commercial carpet is used to complement modern vehicle interiors. The drawer's cross-folded floor ensures maximum support for heavy items placed within and the drawers are equipped with a self-locking, anti-roll back system that locks into place at full extension. Large drawers are key lockable and all feature push-pull slam shut latches for ease of use and maximum security.

Contact your local ARB store or stockist for part numbers and pricing.

Jack

ARB has reinvented the mechanical farm jack using stateof-the-art design, engineering and materials. Introducing Jack.

There's little doubt that the traditional farm jack, often referred to by the brand name Hi-Lift jack, is a handy piece of equipment when you're driving off road. You can use it to move your vehicle out of awkward situations, lift it out of holes to fill in the void beneath the tyres or even as a bead breaker when you have to make a tyre repair.

But farm jacks can be dangerous. They're inherently unstable and there are countless YouTube videos of users copping a whack in the face from a rogue handle or getting their hands caught between the handle and the body of the jack.

So some time ago, ARB's team of engineers were set the task of coming up with a better solution to the farm jack problem. Primarily, it had to be safer and easier to use than a mechanical farm jack, and it should also be lighter and more compact.

Meet Jack.





WHAT IS JACK?

The ARB Jack is a long-travel hydraulic jack with an extruded aluminium body and a hardened military grade nitride shaft. It combines the functionality of a mechanical jack with the ease of use and convenience of a hydraulic jack... and a bunch of other innovative features that make it by far the easiest and safest jacking solution for 4WD enthusiasts.

Features of Jack include:

- Quick release height adjustment to suit different vehicles and conditions
- A wide rotatable foot that provides a stable base and preferred orientation for use on uneven ground
- An ergonomically designed handle that can be operated in confined spaces
- Overload protection so as not to exceed working load limit
- Quick and safe lowering in case of unintended side movement
- A safety stop on the lowering lever to immediately cease lowering if required

ADJUSTABLE HOOK

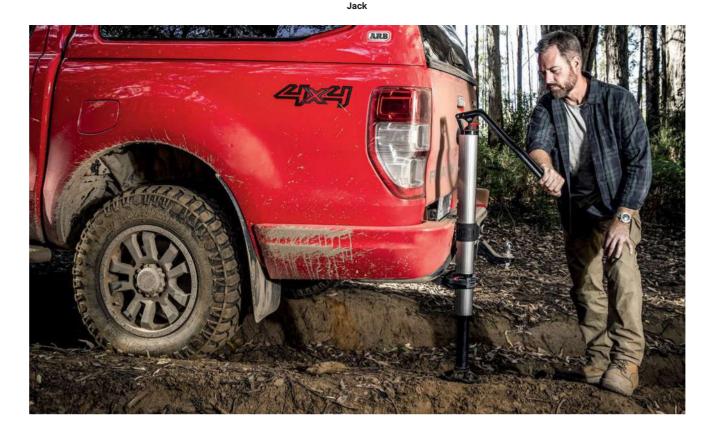
Like ARB's acclaimed BP-51 suspension, Jack's body is made from aircraft grade extruded 6061 T6 aluminium that not only looks great but also offers incredible functionality. Unlike a mechanical jack, Jack has external shelves in its body that allow the hook to be set at various heights without using up jacking travel.

"You can adjust the hook without losing the travel of your jack," explains ARB engineer Josh Harris, who was one of the key people behind the development of Jack. "There are multiple hooking points, or shelves, on the extruded aluminium body of Jack, so you can pick the shelf that's best suited to your vehicle, and the situation it's in, and you still have the full travel of the jack as well."

In its packaged state, Jack's hook is locked into a vertical position to save space. "There's a clamp around the body of the jack that holds the hook," says Stuart Fooks, ARB Engineering Team Leader, "and that clamp has a quick release bike-style lever on it; you flick that open on a cam, that releases the hook and the clamp can run up and down. No tool is required."

"Then the hook locates in one of the shelves," adds Josh. "The hook rotates out and it slots into any of the shelves, depending on which best suits the situation."

Once the desired height has been selected and the hook is situated in the vehicle's jacking point, lifting can begin with around 550mm of travel available.





by far the easiest and safest jacking solution for 4WD enthusiasts.

ROTATABLE FOOT

Another of Jack's innovative features is its rotatable foot that can be oriented to best suit the jacking point on the vehicle and the terrain.

"When jacking, you can rotate the foot and select the orientation that will work the best for the way you're lifting the vehicle," says Josh. "We've constrained the axis of rotation of the foot to one plane. It's been designed with rotation because we understand that you're not always going to be on flat ground when you're using it, and instead of rotating front to back like a conventional mechanical jack, if it works better and is safer to have the rotation perpendicular to the vehicle, or even 45 degrees to the vehicle, we've allowed that to happen."

The wide diameter of the foot provides a stable platform for jacking and it also incorporates a cut-out section so Jack can be easily used as a bead breaker for assisting tyre repairs. "We've designed a bead breaker into the foot because a lot of people use mechanical jacks to pop beads when they get a flat tyre in the bush," says Josh.

"You can inch with Jack"

ERGONOMIC HANDLE

Jack has an ergonomically designed, cast aluminium handle that helps to keep weight to a minimum and, thanks to Jack's hydraulic operation, allows for small adjustments in jacking height.

With a traditional mechanical jack, a full swing of the handle is required to achieve positive pin engagement, which means plenty of space is needed for correct operation. With Jack, small movements of the handle result in small lifts.

"You can inch with Jack," says Stuart. "With Jack, you can move the handle through its full stroke and you get the full stroke of the jack or you can do short strokes resulting in lift that is as short as you want, so there's a lot more precision than when using a mechanical jack."

"Ergonomics comes into it as well," adds Josh. "When you're jacking up to a point where the hook will engage with the vehicle, you can do a full stroke of the handle. Then when the jack starts to lift the vehicle and there's more weight on the handle, you can change your way of pumping to make it ergonomically comfortable and safer. For example, you don't have to do full strokes or if you're a shorter person, you don't have to operate the handle above your head like you would with most common mechanical jacks."

Also aiding operation in confined spaces, Jack's handle is shorter than that typically found on a mechanical farm jack. While this results in slightly greater handle effort, the fact a user doesn't have to use a full stroke to achieve lift actually makes Jack much easier to operate.

Stuart also points out the importance of correlating handle effort and the weight of the vehicle behind lifted. "It gives you a healthy amount of respect for the weight you're lifting," he says. "With Jack, you can feel it and you'll think, 'This is starting to get heavy and I really need to be cautious of what I'm doing."





it's reassuring To know it has built-in overload protection

OVERLOAD PROTECTION

When Jack approaches its working load limit, it's reassuring to know it has built-in overload protection by way of a blow-off valve.

Unlike mechanical farm jacks that use a sheer pin, Jack's blow-off valve doesn't need to be replaced if the working load limit is reached. "The piston inside Jack has a check valve in it so it won't allow you to pump any more hydraulic fluid into the high pressure chamber that would otherwise allow you to exceed two tonnes," explains Stuart.

Put simply, you cannot exceed the working load limit. "The handle will keep pumping but the jack will stay where it is," adds Josh Harris. "It won't drop but you won't be able to advance the jack. So it's saving you and the jack because you certainly don't want more than two tonnes above you."



QUICK AND SAFE

Lowering Jack could not be simpler or safer thanks to a bright red, two-stage lowering lever that provides two speeds and includes a safety stop.

Of course, lowering any hydraulic jack is much quicker than a mechanical jack but unlike traditional hydraulic jacks that usually have a rotating release valve (or screw) operated by inserting the jack handle, Jack has an innovative lowering lever that can be easily actuated using the palm of the hand or thumb.

The first two-thirds of lever travel results in a slow descent speed while the last third of

travel is for quick descent and for packing away Jack when there's no longer a vehicle load on it.

"Jack has got a pin between the high pressure and the low pressure chambers to allow high pressure hydraulic fluid to come back out again," explains Stuart. "The pin is activated by pressing on the red lever. With a bottle jack, you'd release a screw with the handle and the more you turn it the quicker it descends but if something happens and you want to stop, you've got to turn it quickly back in and tighten it back up.

"With Jack we have the same sort of concept but rather than a rotation, it's operated with a red lever, so you push it in a little bit and it'll slowly come down, and you push it in further and it'll come down faster... so you can control the descent speed of the vehicle." If for any reason a user needs to quickly stop vehicle descent, all they need do is release the red lowering lever. This re-engages the pin between the high- and low-pressure chambers inside Jack, which immediately stops lowering.

"We call this feature a Safety Stop," says Stuart. "You can control descent speed of the vehicle with the two-stage lowering lever and then, when you let go of it, it stops. This safety feature can prove invaluable. For example, if you slip because it's muddy, it gives you total control of vehicle lowering using the base of your thumb."



ARB Jack vs 48'' Mechanical Jack

	Jack	48-in Mechanical Jack
Minimum lifting height:	160mm	115mm
Maximum lifting height:	710-1,230mm	946mm
Travel:	540-550mm	831mm
Lifting range:	160-1,230mm	115-946mm
Maximum capacity:	2,000kg	1,050kg
Compressed height:	890mm	1,238mm
Extended height:	1,432mm	1,238mm
Weight:	10.5kg	12.7kg
Lift per stroke:	13mm	25mm

"you can control The descent speed of the vehicle."

PACKAGING

Jack weighs 10.5kg, which is a couple of kilos lighter than the average 48-inch mechanical farm jack. It's also much more compact when compressed with a total length of just 890mm, yet it provides far greater lifting range thanks to the innovative adjustable hook. And maximum lifting capacity of Jack is a whopping 2,000kg, which is almost double the safe working load limit of many mechanical farm jacks.

Jack's extruded aluminium body has a unique teardrop shape for added strength and a hard anodised finish for excellent corrosion resistance. Jack's black nitride military grade shaft is also extremely corrosion resistant, preventing damage to oil seals.

Jack features a durable rubber body bumper that can be positioned at various heights to protect the vehicle when jacking. When Jack is not in use, retaining clips on this body bumper hold the handle in place for easy storage. The hook, which is forged for strength, is held in its storage position by the aforementioned quickrelease lever.

Jack is supplied in a tough charcoal carry bag with distinctive "Jack" and "ARB Recovery" logos and a high-visibility reflective strip. It has tough webbed carry handles and a full-length zip that extends down the side of the bag for easy access to Jack when needed.

Jack is also supplied with a complete Owner's Manual, which covers operation, safety and maintenance.



How "Trip in a Van" Started

Travelling Australia is something we have always wanted to do. We often talked about it but it was just a matter of when. To explore each and every state, discover beaches, hike mountains and witness Australia's stunning scenery was very appealing. Taking the year off work to spend quality time with the family was a very exciting prospect but also very daunting! To drive off into the world of the unknown was a pretty courageous decision but one we knew was absolutely right. So we decided to not only embark on this adventure but also to blog about it under the name "Trip in a Van".

We're Bec and Justin and we have three kids: Jack (five), Billy (four) and Charli (two). Here is a little about our story.

Road to Red Bluff

ABOUT US

Justin had a change in work circumstances, causing us to lose the work/life balance that had kept us going. After 10 years of shift work in the Hunter Valley mines, we made the decision to travel and relocate. Having three children under three years of age and having no family support where we lived brought us to the decision to hit the road. Crazy, right?

Well, we've just had the best two years of our life! We left Newcastle in New South Wales in December 2015, only two months after we decided to hit the road. We put our house on the market as we didn't want any continued attachments and the rental return was dismal with the mining downturn. After seeking out a suitable agent, our house went up for sale and we had an offer that same day, which we accepted. It all happened so fast! We were shocked but knew it was meant to be. We had purchased our caravan only a few weeks beforehand but we were ready to roll. We did loads of research into caravans and found that the quality, build and strength of the Jurgens caravans was hard to pass up. Our Jurgens Narooma, a 23-foot semi offroad van, is a little apartment on wheels. It has triple bunks, shower and toilet, washing machine and a full kitchen. We bloody love it and it's perfect for living in full time. We wanted all the creature comforts in the van to make life easy with the three kids on board. Our van is easy to set up and maintain, enjoyable and has given us two years of trouble-free touring.

With the house sold and the caravan purchased, it was time to pack up and cull our belongings. Knowing we were going to set off (initially) for 12 months, we thought it was best to sell everything. We kept things we couldn't possibly get rid of (photos and mementos), putting them into a small storage shed. After getting our life in order, we drove out of our driveway on 22 December and headed north to be with family for Christmas. We parked up at Justin's parents' house for a month to do a few mods to the van and our tow vehicle. It was a great opportunity to try to adjust to van life but turned out to be a really tough time. Our kids, who at the time were three, two and six months old, clearly felt really unsettled. And Justin had to adjust to being with them 24/7 instead of breaking up his time with them with shift work. It was a huge change for everyone!

We'd saved our butts off for years and spent endless hours researching our travels. We were ready to start our adventure! Here are some tips that we wish we'd known when we embarked on this once-in-a-lifetime experience.





TRAVELLING WITH KIDS

Travelling with kids at any age is exceptionally beneficial to them. It will increase their social skills, give them a love and appreciation of nature and, most importantly, you'll grow as a family. Yes, being with your kids 24/7 can be hard work at times but you will learn how to enjoy your time with them whilst still allocating time alone. Kids also need time to themselves, so scheduling a down day is hugely important.

Travelling with your children comes with its own set of unique opportunities and challenges. It's a fantastic lifestyle for them; they really thrive on the changing environments and meeting new people, especially other kids. From our time on the road, we have seen some awesome changes in our little ones and have hit many milestones. Our daughter began walking, we have nailed toilet training and the boys began riding without training wheels. They've become little fish in the water and we find that it's the best way to expel their energy while having an absolute blast!

Travelling has boosted their confidence, learning and social interaction skills. Nothing beats watching their little personalities grow!

OUR TOURING RIG

We love our BT-50. We kicked off our travels in a 2012 dual-cab XTR that we kitted out for camping and touring. It was an absolute weapon on our first lap of Oz.

After our first year travelling, we picked up Mazda Australia as a major partner and we now travel in a 2017 BT-50 GT. We have set this one up pretty much identically to the first rig. Accessories fitted include a two-inch Old Man Emu lift kit, ARB Summit bull bar, ARB Intensity LED driving lights, Warn winch, REDARC BMS15 dual battery system, storage drawers, MSA drop slide, ARB 60L Elements Weatherproof fridge freezer, snorkel, canopy, Rhino Rack tradie platform and awning.

The gear fitted to this rig has made the vehicle totally capable off road and our travels so enjoyable, easy and convenient.

OUR FAVOURITE DESTINATIONS

- 1. Cape Range National Park, Western Australia – located only an hour from Exmouth on the coast, Cape Range has some of the most amazing campsites you will find anywhere.
- Agnes Water/1770, Queensland the last surf beach in the state as you head north on the coast. If you love the beach, surfing and fishing, then you need to get here.
- Crescent Head, New South Wales a sleepy coastal town on the north coast of the state. Some great beachfront sites around here.
- **4**. Red Bluff, Western Australia the most epic place we took our van. Seventy kilometres of heavily corrugated red dirt access road but definitely worth it.
- Waroora Station, Western Australia amazing, insane, beautiful! Park your caravan right on the beach and enjoy.
- 6. Cape York, Queensland from the moment you hit the development road at Laura, this is a 4WDing and camping enthusiasts' paradise.
- Coolum Beach, Queensland the Sunshine Coast has amazing beaches but this one takes the cake.





SEX ON THE ROAD

We are often asked how we manage to be intimate in a caravan with our three kids on board! So just how do travelling parents manage to have sex with kids in tow?

There is a level of complexity being in a confined space that isn't appreciated by your average parent. What if they wake? What if they see us? What if the neighbours hear? But we manage.

Our sex life has improved significantly since being on the road,

we're less stressed, less tired and have more time to work on our relationship.

You really do just have to deal with having the kids nearby. Unfortunately, our three are too young to be sent to get an ice cream or leave alone in a playground while we do the deed. Here are some tips on managing sex in your caravan with kids on board.

- 1. Our number one secret is to be quiet... if you can.
- 2. Make sure your caravan's stabiliser legs are down. "If the van's a rocking, don't come knocking" is the old adage but if your neighbours know what you've been up to, it's a tad awkward when you greet them the next morning.
- 3. Enforce an early bedtime. Being on the road full time means that we are not in holiday mode, it's a lifestyle and our kids routinely hit the sack at 7.00pm. Which means we can keep the romance alive, knowing the kids are soundly sleeping.
- 4. Make sure you have some sort of privacy. You don't want the kids catching you doing "yoga" under the blankets. We have a concertina door that pulls across to segregate the kids' bunks from the rest of the van (hot tip!).
- 5. Be sneaky! When your kids are fully distracted is the perfect moment to share in some "mummy and daddy time". Trust me, you'll soon figure out how to make it work! At first, it can be pretty unromantic having Peppa Pig as a backing track while in the act but once you get over this, your sex life on the road will be just fine!

BEING COOPED UP

I know, I know, you absolutely love your family and couldn't be without them. But being with each other every single day of every week without a break to catch up with friends, grab some alone time or even go to work can be tough.

Communication is absolutely key and being honest enough to tell each other that you need some time out is vital. If you find your partner is getting frustrated, being short with the kids, anxious and you want to wring their neck, get them outta there! Send them fishing, for a drive, for God's sake even to take a bike ride around the caravan park! Just for a few minutes but more likely an hour... They'll come back like new, a better parent and before you know it, they'll be play fighting with the kids again instead of actually fighting. It's a huge adjustment for everyone being around each other all the time and time out now and again is the only way it will work.



Tell your partner if you need to take some time out, go and grab a coffee, go and chat to another mum or dad a few caravans up. Geez, just go and treat yourself! However you decide to do it, take some quality time for yourself.

Have each other's back, be on the same page and before you know it, you'll be taking it all in and loving your once-in-a-lifetime trip, making some bloody awesome memories!





LOOKING FORWARD

So we've just finished two years of travelling Oz. You might ask, "What's left to see?"

Honestly, we have only just scratched the surface of what Australia has to offer. We have mainly focused on touring with a caravan, hitting all the iconic locations that are easily accessed while towing and that were suitable for our young family.

After doing this, we now have a huge insight into some epic spots and a thirst to get some serious off road and remote locations under our belts. Our first step was to gear up properly with some great ARB accessories that will give us the tools we need and the confidence to tackle the serious tracks on our own. The Summit bull bar and winch are ready to get a workout!

2018 will be a huge year of travelling for us and we can't wait to share this journey with you as we embark on all things caravanning, camping and 4WDing in Australia.

Cheers! Trip in a Van



THE RIGHT RACK

Words by Dean Mellor

There are a number of roof rack options on the market ranging from a pair of cross bars to fully-welded full-length cages. Choosing the right one will depend on your load-carrying requirements, your vehicle, your destination and your budget.

Choosing the right roof rack to suit your vehicle and your needs is not as simple as it once was. These days there's a huge range of load-carrying options for the roof of your vehicle and it pays to study what's on the market before you settle on a solution.

"Firstly, you need to determine what items you need to carry up on the roof rack because that will dictate the style of rack you would go for," explains ARB Product Manager Steve Sampson. And there are certainly plenty of styles, from transversely-mounted roof bars to roof bars with a tray or platform to fully welded roof racks.

ROOF BARS

Traditional old-school roof bars consisted of steel tubes (cross bars) that were connected to steel legs that in turn clamped onto a vehicle's roof gutters. These days the design is similar in concept but the cross bars are made from either steel or alloy and they often have a channel in the top surface designed to accept accessories for securing items. Some cross bars will have an aerodynamic profile to aid fuel economy while others will have a square profile to give them the strength to carry heavier loads.

Cross bars can be fitted to vehicles with or without gutters thanks to vehicle-specific mounting legs that are manufactured from steel or glass-reinforced nylon. Some legs are designed to clamp onto a vehicle's OE front-to-rear rails while others are designed to mount to hard points in the vehicle's roof structure. Steve points out that

> THE LOAD-CARRYING CAPACITY OF FACTORY FRONT-TO-REAR RAILS IS OFTEN LOWER THAN FOR GUTTER MOUNTS OR HARD POINTS,

but these rails can be removed on many vehicles if required and the factory mounting points can then be utilised.

One of the advantages of roof bars is they can be easily removed from the vehicle when not needed, which will minimise wind noise and benefit fuel economy on the open road and aid access to parking where roof height can be an issue. A pair of roof bars will also be easy to store as they don't take up a lot of space.

Roof bars are an ideal load-carrying solution for longer items such as kayaks and surfboards or ladders and lengths of timber. Essentially, the item being carried has to be long (and strong) enough to be secured across the span of both racks. If you need to carry shorter items, you'll either have to add more cross bars or fit a tray, basket or platform.







TRAYS, BASKETS AND PLATFORMS

Many roof bar systems can be complemented with trays, baskets and platforms. While some manufacturers only produce equipment to suit their own brand of roof bars, others produce gear that can be used universally across brands.

There are various tray, basket and platform designs on the market manufactured from steel or alloy. Alloy products are lighter than steel and offer corrosion resistance but purchase price is generally higher than for steel items.

The raised sides and ends of baskets and trays can make it easier to secure loads than with a flat platform as there are more lashing points and the cargo is confined by the raised edges to prevent it from sliding off the roof. The sides also provide mounting points for fitment of accessories such as awnings, as well as shovel and Hi-Lift jack holders.

If roof height is a consideration, a flat platform will be a better option. Some flat platforms

have been designed with channels for the fitment of optional accessories, such as tiedown eyelets, holders for jerry cans and gas bottles, as well as awning mounts and Hi-Lift jack and shovel mounts. Other platforms will have a mesh base that will provide plenty of options for lashing down gear.

A set-up with roof rails and a tray, basket or platform is more easily removed from a vehicle when not needed than a fully welded rack, which is an important consideration for those who regularly use their vehicle around town.

"Height restrictions in carparks are more of a consideration than ever," says Steve, "and if you have a vehicle with a suspension lift and larger tyres, you will have access considerations as to where you can take it around town.

"If you remove a roof rack [fitted with a platform], you'll then have to find somewhere to store it," says Steve. "A rack system will potentially be six feet by four feet, so you'll have to take that into account when it comes to your storage capacity."



FULLY WELDED ROOF RACKS

Fully welded roof racks can also be removed from a vehicle, but as they usually weigh in excess of 20kg and they are quite bulky, most drivers tend to leave them up on the roof.

"The biggest benefit of a fixed rack is that it's always there, so you can always use it," says Steve. "And you will often have a higher load rating than something you can take on and off."

That higher load rating is due to the built-in strength of a fixed rack but the vehicle's maximum roof-load capacity must still be taken into account when calculating overall weight of the rack and the gear it will carry.

"In terms of going for a full-style rack over a set of cross bars and a platform, you're going from something that is bolted together to something that's a fully welded assembly, so you will have more inherent strength in a full steel rack or a full alloy rack," explains Steve.

"SO IF YOU'RE DOING A LOT OF OUTBACK DRIVING ON ROUGH ROADS, THERE WILL BE MORE STRENGTH IN A FULLY WELDED ROOF RACK ASSEMBLY."

Whether steel or alloy, there are several things to look for when choosing a fully welded roof rack. Firstly, the rack must be rated to handle the full roof-load capacity of the vehicle. You'll then need to ensure the mounting system suits the vehicle, whether that's by way of gutter clamps or vehicle specific mounts that attach to hard mounting points on the vehicle. If it's via gutter mounts, look for a roof rack with a full-length channel that distributes the weight of the rack and its load evenly across the gutter of the vehicle. The legs will need to be long enough that the rack will clear the vehicle's roof height, which is particularly important on vehicles with high roofs such as Land Rover Defenders and Toyota LandCruiser TroopCarriers. And you'll have to decide between spaced cross bars or a mesh floor. "Mesh is ideal if you're more likely to be standing up there to take photos or to sleep or whatever," says Steve.

Whether you opt for steel or alloy will depend on your budget and your vehicle's roof-load capacity. An alloy roof rack will cost more than a steel rack but there can be a weight saving of up to 40 per cent, which means you'll be able to carry more gear. And for some vehicles with a relatively light roofload capacity, alloy might be the only viable option. But for the budget conscious 4WDer who needs a tough and robust roof rack, steel is ideal.

No matter the material you choose to go with, examine the roof rack in detail before you buy it. Make sure the welds are of a high quality and, if steel, ensure the rack has been treated with a zinc-rich primer for corrosion resistance. Roof racks should also feature an evenly applied powder coat for a durable and good-looking finish.







ROOF RACK STYLES

There are several roof rack styles including enclosed cage racks, partially caged racks with a flat section for a rooftop tent, trade racks with raised sides but open ends and flat racks. Roof racks are also available in a variety of lengths to suit everything from single-cab utes to wagons.

There are various options available to those who drive a 4x4 wagon, including full-length, three-quarterlength and half-length racks.

WHICH ONE WILL BEST SUIT YOUR REQUIREMENTS WILL DEPEND ON WHAT (AND HOW MUCH) GEAR YOU WANT TO CARRY ON THE ROOF. For those who drive a 4x4 ute, there's the option of a cab rack or, if a canopy is fitted, a canopy rack. If there's a requirement to carry extralong loads, a canopy rack can be combined with one or two roof bars but allowance should be made for potential movement between the cab and the canopy with a set-up like this.

For those with a rooftop tent, a specifically designed roof rack with a flat section at the rear for the tent and an enclosed section at the front for storing additional gear is ideal. Another alternative is a flat rack with no sides whatsoever; this will allow for more options when it comes to placement of the rooftop tent, such as at the rear of the roof, in the middle or at the front... or even sideways mounting.



ACCESSORIES

There are a number of accessories for carrying specific gear on the roof of your vehicle, no matter whether you're running a set of roof bars or a fully welded roof rack.

As their name suggests, wind deflectors are designed to direct the air up and over the load on your roof. While the aerodynamic benefits of wind deflectors are minimal when it comes to reducing fuel consumption, they are very effective when it comes to reducing wind noise, especially on unladen roof racks, which can produce a whistle or humming sound without fitment of a deflector.

There are various attachments for carrying sporting and recreational gear on the roof of your vehicle, from bicycles to kayaks to snow skis to SUPs. For 4WD touring there are Hi-Lift jack and shovel holders, as well as equipment for securing jerry cans, gas bottles spare tyres and more. Or, if you're a tradie, there are conduit carriers, ladder carriers, rollers and securing straps.

Roof racks also allow for the fitment of an awning and there are specific mounting options available depending on the brand/ style of roof rack fitted to your vehicle. You can also mount work lights, light bars and more up on a set of roof racks;

THEY REALLY ARE ONE OF THE MOST VERSATILE ACCESSORIES YOU CAN FIT TO A VEHICLE.

Once you have your roof rack solution sorted, you'll need to be able to access it to load and unload gear, which can be quite a stretch for some depending on their stature and the height of their vehicle. Consider carrying a folding ladder or a step that can be hung over one of the back wheels to make it easier to access items up on the roof.







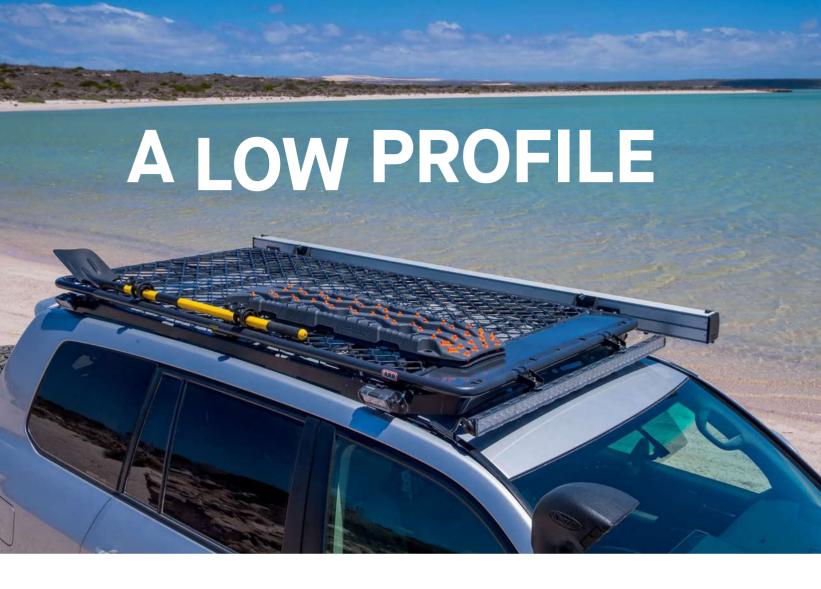
THE LOW DOWN

The maximum roof-load capacity of your vehicle is not the only reason to keep roof load to a minimum; if you throw too much heavy stuff up on the roof, it will raise the vehicle's centre of gravity, which will adversely impact handling and result in increased body roll when cornering and the potential for more fore and aft pitching when accelerating and braking.

Too much weight up top can even reduce your vehicle's off-road capability, especially on uneven ground where the potential for a rollover can be amplified.

For more information and to find out what roof rack setup is right for you, contact your local ARB store and speak to one of our friendly 4x4 experts.





For those who need to keep a low profile, ARB has developed a new range of Flat Racks that offer the ultimate combination of strength, load-carrying capacity and practicality.

ARB has developed a new range of Flat Racks to complement the existing line-up of enclosed cage Deluxe Roof Racks, Touring Racks, Cab Racks, Trade Racks and various other roof-loading options. The new ARB Flat Racks are fully welded platforms that provide the strength and robustness of traditional ARB roof racks with the practicality of a flat roof rack design.

The most obvious advantage of a flat roof rack over an enclosed cage design is its lower profile, which allows for access to carparks that might otherwise be an issue with some vehicles, especially if they've been fitted with a raised suspension and/or larger tyres. Other advantages? The lower unladen profile can be beneficial when it comes to fuel consumption, wind noise and, as ARB Product Manager Steve Sampson points out, "to save a little bit of weight compared with a full cage assembly".

The ARB Flat Rack range consists of nine models of various lengths and widths to suit a wide range of vehicles. Lengths range from 1,330mm to 2,200mm and widths from 1,120mm to 1,250mm. "There are nine flat racks in total: six in steel and three in alloy," says Steve. "The advantage of having the Flat Rack as opposed to the Touring Rack – which is flat at the back but still has the framework at the front section – is you can mount a rooftop tent further forward or you can have it in the middle; you don't have any restrictions as to where you mount it on the roof rack."

Steel Flat Rack models have closely spaced cross bars to form the base while the alloy models have Amplimesh flooring, the latter more suitable for users who want to use the rack as a platform on which they can stand, or even sleep, by rolling out a swag, for example.

Both the steel and alloy ARB Flat Racks have a 150kg-load capacity, subject to the vehicle manufacturer's quoted roof-load capacity and rack weight, including mounts. The steel models have a zinc-rich primer for corrosion resistance and all ARB Flat Racks are finished in a millennium grey powder coat. Flat Rack





"The Flat Racks have all been designed to use ARB's existing roof rack mounts... so we haven't had to redesign the mounts," adds Steve, which means they are available for fitment to a wide range of vehicles.

Complementing the new Flat Rack range will be a variety of accessories, including awning mounts, rollers and more.

STEEL FLAT RACKS

1,330mm x 1,250mm	23kg
1,850mm x 1,120mm	27kg
1,850mm x 1,250mm	30kg
2,200mm x 1,120mm	31kg
2,200mm x 1,250mm	33kg
1,790mm x 1,120mm	26kg

ALLOY FLAT RACKS

24kg
22kg
20kg

N.B. Weights for rack only, not including fitting kit.



Words by Mark Berger

Right Advice









Getting the right advice is crucial when decking out your 4WD or preparing for a trip, especially when you're venturing into something new.

Often it is other product users we turn to for advice and ideas because confidence comes from hearing from real people with real experiences. Product users and experienced 4WDers are a fantastic resource to learn from. So where can we find reputable people?

At any one time, hundreds of the most qualified product users are out there on the tracks, living the dream, putting their 4WDs through their paces, testing and experiencing products in the real world. Of course, there are another 500,000 "experts" available across various websites and social media pages that unfortunately can sometimes be hard to validate.

For those of us who prefer the opportunity to talk face-toface with experienced 4WD users in our own neighbourhood, there is another network that is readily available; a network full of 4WD enthusiasts with some of the most diverse 4WD backgrounds. We Get It





Gary Woodhead, ARB Jindalee

ARB 4x4 Accessories is more than just a 4x4 accessory retailer and a recent internal survey conducted confirmed our suspicions. Throughout ARB's 61 branded stores are over 600 experienced 4WDers who collectively own more than 680 4WDs. Our stores are filled with passionate 4WDers, people who have travelled extensively and have real-world experience having owned and set up a range of vehicles.

Collectively, ARB staff and store owners have experienced the highs and the lows of off road travel; they have experimented with vehicle set-ups, towed camper trailers to remote locations and battled the range of extreme conditions our great land is known for.

Behind the scenes, our engineering and product development team is made up of experienced 4WDers who use their own and others' real-world experiences to promote the innovation of new products that we can all enjoy. So whether you are getting ready for an epic trip to the Cape, setting up a vehicle to tow your new caravan or restoring an old classic, whether you're a tradie who likes to escape for the weekend, a young family exploring new horizons or a lifetime 4WDer, at ARB, we get it!

"We Get It" is a promotional campaign that you are likely to see across a number of mediums going forwards. Join us as we explore the passions in 4WDing of some of the staff who represent the wider network of 4WD enthusiasts that is ARB 4x4 Accessories.

And if you ever need some advice, or to simply spitball some ideas on a trip or vehicle set-up, be sure to drop in to your local ARB store. We can't promise you that it will be a quick visit, as our staff can get a bit excited when talking to customers about their fourbies.



When it comes to customising your 4x4, at ARB...

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Many of our staff have set up a number of their own 4WDs over the years and with each build they learn something new, which drives them to their next build. Each build is that bit better and there comes a point when accessorising becomes customising, really making their 4WD their own.

One example is Gary Woodhead from ARB Jindalee (pictured opposite). Gary has owned a number of 4WDs over the years and his most recent build is one that has grabbed a lot of attention. Gary's 79 Series LandCruiser takes accessorising and customisation to a whole other level with custom upholstered RECARO seats and a custom headboard that is the air tank for the mounted twin compressor. Behind the cab is a custom alloy tray, while upfront we have colour-matched aerials.

Across the network, this 79 is just one of many customised vehicles that have been built with the help of ARB branded stores. If you have a custom build in mind, come on in for a chat because at ARB, we get it!



EASY LIFTER

The new ARB Tailgate Assist is the perfect solution for anyone who's ever struggled to lower or lift a ute's heavy tailgate.

You know the drill. Your hands are full and you're struggling to gently lower your tailgate without it slamming down with a bang. Or you've grabbed what you need out of the tub and the weight of the tailgate makes it impossible to shut without first putting down what you're carrying. These inconveniences will be a thing of the past once you've equipped your ute with ARB's new Tailgate Assist.

"Tailgate Assist incorporates two different types of struts," explains ARB Product Manager Rhys Brown. "On the passenger side of the vehicle, we've used a damping strut that controls the opening of the tailgate. Once you've opened the tailgate, you can simply let it go and it'll lower in a controlled manner.

"And then on the driver's side of the tailgate, we installed a gas-assisted traction strut that works in an opposite way to the damping strut, assisting to close the tailgate. This makes closing it a really easy one-handed motion.

"We've effectively reduced the the feel of the tailgate's weight by 50 per cent, thus reducing the effort it takes to open and close it by about 50 per cent," says Rhys.

"All Tailgate Assist kits have vehicle-specific hardware and brackets and, where required, we also replace the OE cable or scissor-strap arrangement that holds the tailgate in a 90° position when opened," continues Rhys. The struts themselves have been codeveloped with world-renowned strut manufacturer Stabilus and ARB has designed a unique mounting system for the struts to ensure longevity. This strength of the mounting system, combined with all of the brackets and hardware that make up Tailgate Assist, is critical when you consider the conditions this product will be subjected to, especially off road.

"Tailgates vibrate a lot and tubs move when you're driving in rough conditions, so we've put these struts through rigorous tests. We're confident in the product and know all the components are going to last," says Rhys.

Tailgate Assist has been under development for some time and ARB has designed several vehicle-specific kits that will be launched to market in quick succession, beginning with Ford Ranger, Mazda BT-50, Holden Colorado, Isuzu D-MAX, Nissan Navara and Mitsubishi Triton. ARB's Tailgate Assist will be available late April 2018, please contact your local store or stockist for availability and pricing.





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ARB continues to expand its range of Tango Sport Lids with Volkswagen Amarok, Holden Colorado, Isuzu D-MAX and Mitsubishi Triton dual-cab ute owners now having access to the most versatile lid on the market.

The ARB Tango Sport Lid caused a sensation when it hit the market last year, finally providing dual-cab ute owners with a genuine alternative to a traditional canopy, loaded with features, upgradeable with a host of optional accessories and remote-lockable for easy security.

ARB has recently expanded the range of Tango Sport Lids to cover the Volkswagen Amarok, Holden Colorado, Isuzu D-MAX and Mitsubishi Triton.

The Tango Sport Lid is a unique one-piece design with the OE sport bar attached directly

to the lid, unlike traditional three-piece sport lids that consist of a lid section and two space-robbing side pods for retention of the OE sport bar. A special pivoting system prevents the OE sport bar from coming into contact with the vehicle cabin when opened.

The Tango Sport Lid is a single-skin design with a complete aluminium frame, so it's stronger than traditional ute lids. It also incorporates two full-length channels for fitment of Thule or Rhino cross bars directly to the lid itself, to which optional accessories such as a cargo basket or bike carrier can be added. Additional features of the Tango Sport Lid include remote central locking via the vehicle's OE key fob, soft-touch unlatching mechanism for easy opening and LED interior lighting.

In the case of Amarok, Colorado and D-MAX, the Tango Sport Lid mounts to ARB's innovative Tango Mount Rail system, which consists of full-length channels mounted to either side of the ute's tub. This system is integral to the unique pivoting system and it also allows for easier removal of the Tango Sport Lid when not required. The Tango Mount Rail accepts cross bars when the Tango Sport Lid is removed. It also allows for ARB's innovative Load Master, which is essentially a cargo organiser that creates a barrier within the tub, and incorporates handy canvas pockets for storing smaller items.

Due to the Mitsubishi Triton's unusual shaped OE tub, a different mounting system has been developed to secure the Tango Sport Lid. ARB Product Manager Rhys Brown explains, "The Triton Sport Lid is aesthetically the same as all other Tango Sport Lid vehicle applications and it has the same features and benefits from an accessory point of view. You can still install cross bars and other accessories with the same weight load – 75kg and reduced to 20kg when opening the lid. However, the Tango rail system is not utilised in this particular application.

"So you can still put the Triton's OE sport bar on," adds Rhys, "and it's still centrally locked, it still has the auto-switched interior light and the load carrying capability... all of the features and benefits of the other lids, the only difference is that there is no Tango Mount Rail."

Head to arb.com.au to see if there's a Tango Sport Lid to suit your dual-cab ute.

The Breakdown We Had to Have

Words & Photography by Emma George

ARB

Stuck in the Flinders Rangers, camping by the side of the road and waiting for repairs wasn't what Emma George and her family envisioned for their dream lap of Australia. After two weeks of delays, they were faced with a dilemma that might put an end to their trip of a lifetime.



Red Dog (our '99 GU Patrol) is more than a car to us; she has been part of our family for almost 20 years and taken us on countless incredible adventures. If anyone dared mention buying a new car, it would almost warrant getting their mouth washed out with soap. We know Red Dog so well that any strange noise or sniff of burning oil would have us pulling off the side of the road and checking everything was alright.

Today was one of those days. Three months into our big lap, we had traversed some of the roughest tracks in the Kimberley, which left us fixing a broken exhaust and patching up a leaking diff with silicon by the side of the road. We limped into Darwin to have our fuel tank welded, our diff sealed and a few minor problems corrected. We thought our troubles were behind us as we motored south in search of a reprieve from the approaching summer until Ashley, my husband, heard an unusual knocking sound under the bonnet.

We were in South Australia's Flinders Ranges for a quick visit before heading north through the desert and into Queensland. By the time we finished our tour of the old Blinman Copper Mine, it was late afternoon and we headed back towards our campsite at Parachilna Gorge. The recent rain meant the usually dry riverbed was flowing, we had access to water and shade alongside the riverbank, and it was a great base away from the school holiday crowds.

Thinking the rattle was nothing much, Ashley pulled to the side of the road and instantly the engine shuddered and shut down. After lifting the bonnet, all seemed in order until we tried to restart the car and it wouldn't give anything more than a continuous tick. Out came the tools and a few more checks before Ashley concluded that it could be terminal. My mind was spinning; we were only halfway through our adventure and all the months of preparation, mechanical checks and work we had done on Red Dog to ensure she would make the distance may have been in vain.

It was a sorry sight, Ashley draped over the bonnet with the kids crowding around, not knowing if this was the end of our dream. We weren't within phone range but thankfully we were only a couple of kilometres from the small town of Blinman. Breaking down isn't good but it could have been much worse considering the extremely remote places we had recently been. I was devastated to leave Red Dog behind and silently tallied the thousands of dollars we had spent upgrading components and keeping her running, wondering if we should have bought that new car after all.

As we walked along the dusty track back to town, two unlikely saviours approached on mountain bikes, offering help. As luck would have it, my parents had joined us for this section of the trip and were camping just 40 minutes up the road. Our good Samaritans offered to ride to our camp and alert my dad to come and collect us as we had no way of contacting them.

It was an easy walk into Blinman and although we still had no phone reception, the publican let me use the hotel phone to call the RAC. It would take the RAC a couple of hours to reach us and being dinner time, we made the most of it and sat down for a counter meal while we waited for them and my dad.



Making the Most of a Breakdown

We were hoping for the best but before Red Dog was towed away we salvaged the fridge and most of our food as we didn't know when we would be reunited. Not being within phone range at camp made it difficult to coordinate logistics and as we needed a car, we hired a 4WD from the closest town of Hawker, 110km away. Our campsite was great, not to mention free, as the expenses were starting to add up and we were bracing for more. Following a hectic three months of moving camp every few days, perhaps this was the breakdown we needed, an enforced break and catch up.

A couple of days passed and still no news. I was doing daily runs to the Prairie Hotel where I could find one bar of mobile reception.

It was time to farewell my parents as they continued on their journey and we started a routine of doing some much needed schoolwork with the kids. Being in the Flinders Ranges was a great opportunity to focus on geology and the boys collected a range of rocks, classifying them with some help from Ashley. We joined a 4WD tag-along geology tour where we saw everything from fossilised salt to folded rocks, meteorites and even stromatolite fossils.

Day four and after numerous tests on the car, we finally had word that the fuel pump had failed. It was surprising considering it had been fully rebuilt less than a year ago. The mechanic was confident he could get it repaired in Adelaide and hopefully have us back on the road within a week. Resigned that we would be here for some time, our campsite became increasingly sophisticated.

The swing was up, the campfire and wood supply extended, and the boys spent hours

making pools in the river so they could enjoy a paddle. We built an 800m mountain bike track, complete with jumps and water crossings. We rode one lap after another, trying to catch each other and get more air on each jump. A cheap camp oven was purchased from the small caravan park up the road and I extended my limited skills to cooking scones, cakes, bread, pizzas and sausage rolls. We spent hours sitting by the fire, chatting and enjoying the time and space, something we had been missing on our whirlwind tour.

The Flinders Ranges has so much to see and we kept ourselves busy exploring the area. We enjoyed walking through Wilpena Pound and visiting the pastoral stations of the 1850s in the Aroona Valley. The 20km drive through Brachina Gorge was a fascinating geology session as exposed rocks from 500-650 million years ago can be observed along the well-signed trail.





We spent hours sitting by the fire, chatting and enjoying the time and space, something we had been missing on our whirlwind tour.

Most days, I drove to the Prairie Hotel to check messages and see when the car would be ready. We were already more than a week behind schedule and to make matters worse, the courier misplaced our fuel pump, which delayed us further. There was nothing we could do but extend our hire car and make the most of the Flinders Ranges. We marvelled at the Aboriginal rock carvings at Chambers Gorge and the kids never tired of catching the local bearded dragons that appeared happy when handled. There were plenty of old ruins to explore and the boys delighted in just hanging around camp, enjoying the river, the bike track and constructing huts.





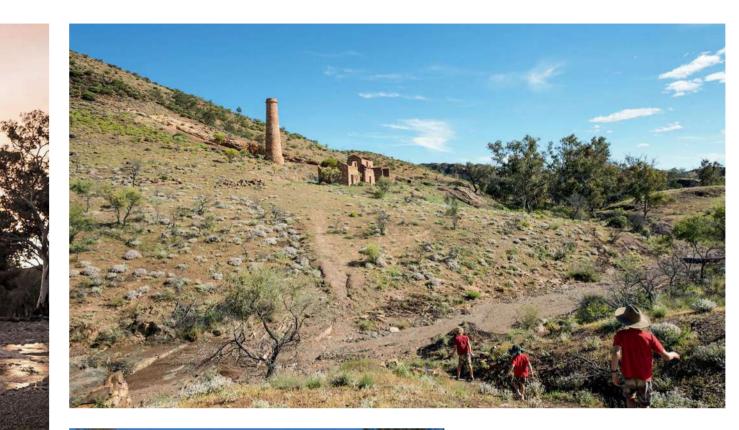
Finally, the news we were waiting for; the fuel pump was fixed and back in our car. However, the mechanic informed me that he had run some tests and that I wouldn't be happy. My exuberance soon turned to devastation when I was told we had a cracked piston. I wondered how I was going to break the news to Ashley when I got back to camp. The mechanic's advice was to pull the engine apart, fix the piston before any further damage was done and he might be able to get us back on the road in four to six weeks.

It was a sleepless night for us both. We were stuck on the side of the road, our trip evaporating before our eyes, the creek had nearly stopped flowing and we had a choice: either we fix the car or buy a new one. Buying a new 4WD would cost thousands, then we would have to kit it out so it was our least preferred option although we desperately wanted to finish our adventure.

We drove the 110km to the mechanics to see Red Dog and make a plan. I checked if the mechanics test was accurate and he was adamant that a piston had failed. I asked how far we would make it and he estimated maybe one or two thousand kilometres but definitely not 10,000km and we had at least 20,000km to go. I took a video of the car as it started up and everything sounded the same as usual; after all, Red Dog is no spring chicken. I called our local mechanic and our turbo specialist in Perth as both of them had spent countless hours on our car over the past decade. Our mechanic advised that there wasn't much difference in repairing four pistons over one and we wouldn't do that much more damage than we had already done by driving the car. The turbo specialist saw the video and he agreed that we should at least drive towards civilisation and see how we fared.



The verdict was unanimous and our favourite new saying became "Risk it for The biscuit". Nervous but excited, we were glad to see the old girl drive out of the garage but little did we know, we would be back again the next day. Fuel was spurting out of our newly refurbished fuel pump, the one we had just paid thousands of dollars to fix. The mechanic checked the fuel pump and decided a faulty copper O-ring was to blame and he could remove the pump and send it back to Adelaide. We had the trailer hooked on behind us and decided to take matters into our own hands and drive to Adelaide to get it fixed ourselves. Although we were heading in the opposite direction, it was good to be back on the road.





We made it to Adelaide, the engine seemed OK and we managed to get the O-ring replaced, which was a simple one-hour job. We wondered if we should start looking for a new car but after travelling 1,000km, we felt Red Dog had more life in her yet. It was a crossroad: do we change our itinerary, stay on the bitumen and have backup if our engine failed? Our hearts were set on heading to Cameron Corner, Innamincka, through the Strzelecki Desert, the Channel Country and up to Longreach. Our parents were aware of Red Dog's mechanical problems and our wish to complete the trip as planned. They offered to come and rescue us if the car died, even if we were in the middle of nowhere. As we were carrying a satellite phone and had plenty of food and water, it didn't seem too crazy.

The next step was a family decision and the kids have equal voting rights with Ashley and me, the question being should we take a risk and head for the desert or play it safe and stay on main roads? The verdict was unanimous and our favourite new saying became "Risk it for the biscuit". We loaded up with supplies and headed towards Broken Hill and beyond, crossing our fingers that Red Dog would make it.

POWER IN PLACE

The all new 12-inch Auxiliary Battery Box and Tray from ARB are designed to meet the ever increasing 12V power needs of 4WD tourers.



"DESIGNED FOR USE IN RUGGED CONDITIONS, SUCH AS THE BACK OF A UTE, WHERE IT CAN BE EXPOSED TO THE ELEMENTS"



ARB has developed a new 12V Battery Box and Tray that allow for easy vehicle mounting, either in the cabin or outside in the elements. Both new products provide a robust battery mounting system and are compatible with REDARC BCDC chargers and the ARB dual battery wiring kit.

"A battery box is a pretty simple product," says ARB Product Manager John Bamfield. "Its basic design is to hold a battery in place." John also points out that the new ARB Battery Box and Tray are more robust than anything else on the market and they are unique in that they're designed to work in conjunction with an optional mounting kit.

"If you look at what else is on the market, the black plastic boxes are the most rudimentary battery boxes available," says John. "There's very little provided in the way they mount to the vehicle. They just float around or it's left up to the user to do their own thing in regards to tying them down.

"We have developed three individual components: the Battery Box, the Battery Tray and the Mounting Kit. These can be purchased separately or as a full Auxiliary Tray Kit or a full Auxiliary Box Kit. The kit includes the Box or Tray, the Mounting Bracket, ARB Auxiliary Battery Wiring Kit and REDARC BCDC1225D charger."

The Battery Box is designed for use in rugged conditions, such as in the back of a ute, where it can be exposed to the elements, as well as cargo that might be sliding around in the tray or tub. The Battery Box is manufactured from durable steel that has been coated with a zinc-rich primer and finished in a vintage silver colour.

"If you've got an area that's exposed, then you're more likely to put a battery inside a battery box so you're protecting it from contact with cargo," says John. "The box protects the battery from being damaged by all those things that might be floating around in the tray."

The Battery Tray, which is also made from steel, has been developed for applications where the battery might be located inside the vehicle. "The perfect example for fitment of a battery tray is with a drawer system," says



John. "Where there is space on either side of the drawers, the Battery Tray is designed to fit inside this area and the side floor kit will then cover the battery to protect it from contact with cargo." The Battery Tray Kit is also supplied with a rubber insulating boot to protect the positive terminal that is supplied with the ARB Dual Battery Wiring Kit.

Both the Battery Box and Tray are supplied with a steel battery clamp to hold the battery in place and are compatible with the Optional Mounting Kit. The battery clamp also incorporates holes for easy mounting of the MIDI fuses supplied with the Dual Battery Wiring Kit. The Mounting Kit itself is permanently affixed to the vehicle and consists of a mounting plate and two under-floor braces to hold it in place. The kit also includes a selection of steel packers to be used in conjunction with the under-floor braces to help negotiate uneven mounting surfaces like the floor of a vehicle tub. The Battery Box or Tray can then be attached to the Mounting Kit using four bolts. John Bamfield points out that the set-up allows for easy removal of the Battery Box or Tray if the full capacity of a ute's tub/ tray is required for loading large items.

Both the Battery Box and Tray have been designed for compatibility with REDARC BCDC chargers. "There's a panel that can be attached to the side of the tray that is held in place with three bolts," explains John. "The BCDC charger mounts to this panel, which can be relocated to sit in any of the four corners of the tray in left-hand or right-hand positions. This means there are essentially eight different mounting positions depending on where you mount the Battery Tray in your vehicle and where you want the BCDC charger fitted." "The BCDC charger, which comes in two sizes, mounts on the outside of the Battery Box on any of the four vertical sides," continues John. "It can also be mounted on the inside of the Battery Box if a smaller battery is used. And as the BCDC charger is designed to live in the weather, there are no issues with it being on the outside of the Battery Box, even if left exposed to the elements."



Both the Battery Box and Tray will accept batteries up to 330mm x 172mm x 235mm (length x width x terminal height) and weighing up to 32kg, so 4WD tourers will always have plenty of 12V power when they need it.



HILUX DUAL BATTERY TRAY

Toyota HiLux 2016 on owners can now benefit from a vehicle-specific dual battery tray. The tray has been designed around fitment of REDARC's BCDC range of chargers and in conjunction with the ARB Dual Battery Wiring Kit.

The tray mounts in the passenger side rear corner of the engine bay and due to limited space, the battery needs to be fitted in the correct orientation – with the negative terminal at the rear of the tray against the firewall on the inboard side.

Made from durable steel construction for maximum strength, the dual battery tray is coated with a zinc-rich primer and finished in a black powder coat.

Part Number 4214080 RRP \$230.00 (East Coast Metro)

TRICK TROOPY

With recent updates to the 70 Series vehicle platform, ARB engineers have used this opportunity to develop Summit side rails and steps to suit the LandCruiser 78 Series Troop Carrier.

Updates to the front gearbox mount have been incorporated into the Troop Carrier step design to ensure this new product fits both pre- and post-facelift model Troop Carriers. The front rail has also been designed to suit both flared and non-flared applications.

Additional protection from road debris hitting the lower sill sections of the vehicle body has been considered and ARB engineers have developed a powder-coated bolt-on infill panel that bolts to the aluminium extrusion on the step.

The vehicle-specific mount design is made from a durable steel construction for maximum strength and protection. Finished in a satin black powder coat, Troop Carrier owners have the option to colour-code to suit their vehicle.

Contact your local ARB store or stockist for part numbers and pricing.



DROP AND SLIDE



Lighter. Stronger. Safer. Smarter.

The MSA Drop Slide slides out from its stowed position and lowers a full 30cm in one smooth, safe and easy motion. This enables the platform to remain in a perfectly horizontal position the whole time. It also allows for unrestricted access to your fridge at a safe level with ease before raising the slide in one very light and easy motion back into its stowed position.

The MSA Side Drop Slide models are also available, designed for specific applications where your drop slide is better suited sideways as the vehicle doesn't have enough depth for a standard Drop Slide to be installed.

Contact your local ARB store or stockist for part numbers and pricing.



PRADO PROTECTION

ARB has developed a ground-up new Summit bull bar to suit the recently redesigned and upgraded Toyota Prado.







oyota recently upgraded its popular Prado wagon with refreshed styling and the addition of advanced safety features to the lower grade GX and GXL automatic variants.

The bonnet of the revised Prado now has a sculptured centre for enhanced downward visibility as well as redesigned front guards that are claimed to help the driver better judge the location of the vehicle's extremities.

Other styling changes include a revised grille with broad vertical bars and redesigned headlights.

The advanced safety package, which is now standard on all automatic model Prados, includes a pre-collision safety system (PCS) with autonomous emergency braking and pedestrian detection, active cruise control (ACC), lane departure alert and auto high beam. The PCS relies on a camera, mounted behind the rear-view mirror and a radar in the grille, allowing the Prado to brake autonomously if required to avoid a collision.

The upper-spec VX and Kakadu models are also equipped with a multi-terrain monitor that allows the driver to select from front, rear and two side cameras to check for blind spots or to spot obstacles when driving off-road.

SUMMIT BAR

ARB has completely redesigned the Summit bull bar for the Toyota Prado 150 to suit the vehicle's refreshed styling and safety upgrades.

"There were quite a few things we had to redesign due to changes to the vehicle," explains ARB Product Manager Steve Sampson. "The vehicle itself has new guards, bonnet, grille and headlight assembly; everything was basically pushed out between 100mm and 150mm, so we've had to design a bar that doesn't stick out farther.

"The revised Summit Bar has new wings, pans, control box mount, cover panel, straps and uprights, outer frames and under-panels, so it's basically a ground-up new bar."

The only carryover components from the previous Prado Summit Bar were the airbag compatible chassis mounts and some trim pieces, such as the front buffer section and three-piece grille. "Apart from that, pretty much every other component is new," says Steve.

The Summit Bar is manufactured from durable steel and it includes provision for the OE parking sensors and fog lights (where fitted). The bar can also be equipped with an optional ARB fog light kit on GX models, which are not supplied with OE fog lights. Press-form apertures in each wing accommodate LED clearance lights/turn signals.



Features of the Summit bar include ARB's multi-fold upswept and tapered wing design, a large 30mm radius on the wings and centre section, a split pan with a two-piece grille for optimum airflow to the vehicle's cooling system, twin jacking points, antenna brackets and provision for fitment of driving lights.

On vehicles fitted with a winch, the Summit Bar features an integrated control box mount that's designed to recess the control box lower in the pan. There's a door in the grille for access to the winch clutch.

A zinc-rich primer is applied to the Summit Bar for additional corrosion resistance and it can be supplied with a black satin powder coat finish or there's the option to colour code it to suit the vehicle.



ADDITIONAL EQUIPMENT

The ARB engineers have been working around the clock on the Summit Sahara Bar and the Alloy Bar to suit the revised Toyota Prado and despite both of these products also requiring a groundup redesign, they will be available by the time you read this article. The Summit Side Rail will also be available.

Despite the Toyota Prado's extensive restyle, a number of ARB accessories have not required a redesign, including the existing Summit step and return, under vehicle protection (UVP), recovery points, roof racks and dual battery system.



Mitsubishi Triton Protection



TRITON STRENGTH

With over 40 years of experience in manufacturing 4x4 accessories and a team of more than 60 engineers, ARB ensures that each and every customer has as much choice as possible for their vehicle. Mitsubishi Triton 2015 on owners now have the option of a Summit Sahara bar, providing a stylish and practical alternative to the Summit or Commercial bars already available. ARB's Summit Sahara bar offers a unique look and practical features that are perfect for both on and off the road.

When driving off road, it is imperative that you have ample ground clearance and optimum approach angle and the Summit Sahara bar ensures this is taken care of with its multifold upswept wing design. Available with or without a centre tube that can also be supplied polished or painted, it offers 4WD owners further flexibility when it comes to achieving the desired look for their vehicle.

The Summit Sahara bar offers a solid mounting platform for a wide range of accessories, including driving lights, antennas and a winch. Mounting a winch to a vehicle requires a properly supported structure that is designed to accommodate the stresses of winching. The Summit Sahara bar is designed and tested to endure and exceed winching loads.

ARB's engineers give careful consideration to maintaining sufficient airflow to the Triton's radiator. The wide, split plan design provides greater airflow to the radiator and the twopiece grille incorporates a hinged opening to allow access to the winch clutch handle.

A jacking point is located under each buffer for optimum strength. The Summit Sahara bar is treated with a zinc-rich primer for additional corrosion resistance and is finished in a satin black powder coat or optionally can be colour-coded to match the vehicle colour. The Triton Summit Sahara bar is compatible with the ARB Recovery Point for this model and fitment is recommended at the same time as bar fitment.

Contact your local ARB store or stockist for part numbers and pricing.

Charitable Travel

Water for Africa

Words & Photography by Steve Fraser



It's unimaginable that over 600 million people across the world don't have access to clean, safe drinking water.

One in 10 people on the planet (that's twice the population of America) struggle to find clean water to drink every day, something you and I take for granted. Charitable Travel



Access to water is not only the difference between life and death, it is also the catalyst for sustainable change. Each day, thousands of people in Africa make the long, and often dangerous, trek to fetch water.

It is frequently the younger women who carry out this arduous task. Women are at significant risk of being attacked when they leave the safety of their villages to trek many kilometres to collect water. Not only is their personal safety in jeopardy, but so is their education. They either miss school or are unable to attend at all.

On previous trips to Africa, I have been so impacted by this plight that I wanted to get involved and do something about it. In 2013, I became an ambassador for Water for Africa – an Australian-based charity working in Tanzania and Mozambique. Phil and Julie Hepworth (founders of Water for Africa) have a passion to see Africa transformed through the provision of clean water.

The impact of one well in one village can be life-changing. Infant mortality rates are vastly reduced, the risk of violent attacks outside of the village is removed and school attendance increases significantly. The result is a new generation of healthy, happy and educated people. The impact of one well in one village can be life-changing... The result is a new generation of healthy, happy and educated people.

I love the change Water for Africa is bringing to hundreds of thousands of lives each year. In 2017 alone, they provided clean, fresh water to more than 500,000 people.

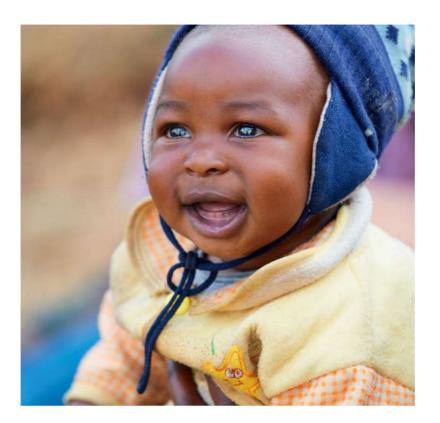
I have seen what villages were like before the provision of a well and after. Water transforms lives.

On my most recent trip to Africa, I worked with the team in the Mafinga area in Central Tanzania – an extremely poor region, even by African standards.

Getting there involves a long-haul flight from Perth to Dubai, another to Dar es Salaam, a short plane ride across the mountains into Iringa and then a drive to Mafinga.







Many villagers think that water is brown and dirty and when they see clear, fresh water for the first time, they think it's a miracle. The drive to Water for Africa's base takes an hour and a half, even though it's only about 60 kilometres. The roads are fairly ordinary and the local police are keen to take advantage of anyone doing the wrong thing, a trait that seems common the world over.

Since I've been there a few times now, I have the routine down pat. I settle into my accommodation, enjoy a hot shower and good meal, then it's time to hit the road and start installing a well. The process takes around a week in total. After selecting the site, the drilling begins. The depth of the well varies but about 20 metres in this region is average. A liner is installed and left for a few days to let the water settle. Then the team come back, lay a concrete base and return the next day to install the pipes and hand pump.

When the water pours out of the well for the first time, the entire village turns out for the event. They sing, dance and rejoice. They realise how important and life-changing this moment is.

If you are reading this, you are probably someone who loves to get out in the bush in your 4WD and will understand the importance of having a good supply of clean, fresh water.



When I'm out bush and come across a good water supply, even if I'm not running low, I fill up my water tanks.

Can you imagine growing up thinking that water is a dirty brown colour? Many villagers think that water is brown and dirty and when they see clear, fresh water for the first time, they think it's a miracle.

Water for Africa has also started running medical clinics when they install wells in villages. I spent a couple of days on this trip watching hundreds of people, with everything from infections to major injuries that required hospitalisation, come for treatment.

I met one very special young lady at a clinic and her story is both heartbreaking and inspiring.

So many people have given finance and encouragement and supported Water for Africa in significant ways. ARB has been a part of the support network and it has made a big difference.

Over the years, ARB has been extremely generous in their support of Water for Africa and recently went above and beyond, providing swags, a rooftop tent and camping gear so the drilling and maintenance team could sleep on location and not waste hours driving back to the base each day.

This will make a significant difference and will result in more people receiving clean fresh water in 2018. Sincere thanks are due to the team at ARB for making a difference and being part of a lasting solution.

Water for Africa has a plan, a strategic approach and a tender heart for the people of Africa. If you want to be involved in bringing about long-term sustainable change, then can I suggest you find out more about Water for Africa?

Together, we can bring clean water to the forgotten 10 per cent of our planet and, in the process, help bring about a better future. For more info on Water for Africa, check out their website **www.waterforafrica.org.au**.

Social Media Changed a Life in 45 Days

This is a story of hope. This is Halima's story.

Halima is 14. Two years ago, she was badly burnt in an accident when she fell into a fire during an epileptic seizure. Her face, neck and hands were severely damaged. She received no hospital treatment as her family couldn't afford it.

Her father died some time ago and her mother abandoned her after the accident. Today, she lives with her 70-year-old grandmother in one of the poorest villages in Tanzania, so you can imagine how difficult life is for her.

As Halima continues to grow and mature, the facial deformity is only likely to worsen because of the lack of skin flexibility in her neck area.

Despite her severe injuries, she is a gentle, cheerful soul who loves to play and enjoys eating lollies like most 14-year-old kids.

Water for Africa was desperately trying to help find a solution for Halima, which would involve surgery to return some normality to her life. Even though she is currently on epilepsy medication, she struggles with everyday tasks.

Obviously, surgical reconstruction is extremely expensive and very specialised. Coming from a background of extreme poverty, Halima's only hope was a small miracle.



Her future was looking very bleak until the amazing power of social media kicked in. I decided to share her story on social media and something wonderful happened.

Across the various platforms, more than one million people read her story, thousands sent their love through generous comments and, thanks to tens of thousands of shares, a few uniquely gifted surgeons decided to change Halima's life.

Forty-five days after the original post, I was extremely happy (actually that is a serious understatement – I was so pumped) to share that Halima had undergone lifechanging surgery, which went wonderfully well.

Halima had eyelid, neck and mouth release surgery and will require a further operation next year to fix her hands.

I often question the value of social media but it has given a sweet little girl a new chance at life.

I have an amazing life, travelling the world taking photographs and visiting some of the most remote places on the planet. Out of all the amazing opportunities and experiences I have had, I will look back with eternal gratitude at the smile on Halima's face when she realised that some extremely generous people cared for her.

ARB understands 4x4 Culture is a family magazine with articles and information for all ages. Because of this, we have decided not to show the graphic imagery of Halima before she underwent surgery. If you would like to view Halima's pre-surgery images and find more information on how you can help with Water for Africa, please visit arb.com.au/waterforafrica



AMAROK ARSENAL

SUMMIT SAHARA

Volkswagen's facelift of the Amarok and introduction of the V6 engine option resulted in a redesign to the original equipment under panels in both models. To allow fitment of these redesigned panels, ARB engineers developed a vehicle-specific Summit Sahara bar.

The Summit Sahara bar features the latest styling from ARB, including press-formed cover straps, larger ARB fog lights and surrounds, a three-piece split pan grille





with access doors to the winch clutch handle and a recessed winch control box mount for a sleek and seamless appearance.

The Summit Sahara bar also includes provision for driving lights, CB aerials and a range of electric winches. Designed with safety in mind, the Summit Sahara is engineered to be compatible with the Volkswagen Amarok's safety features including the OE front parking sensors.

Available with optional polished or painted centre tube, the Summit Sahara bar for the Volkswagen Amarok is prepared with a zinc-rich primer for additional corrosion resistance and comes standard in a black powder coat with the option to colour-code to your vehicle.

Part number 3970030

Contact your local ARB store or stockist for pricing.

IN RANGE



ARB Frontier Tank

ARB has redesigned the TAD103 Frontier Tank to allow fitment to the 46 diesel version of the Volkswagen Amarok. With this redesign, engineers have been able to increase the capacity of both the four-cylinder and six-cylinder Amaroks to 130 litres. This is a 50 litre increase over the original 80 litre tank.

Made in Australia, the Frontier long-range tank is less than half the weight of a steel tank and utilises existing vehicle mounting points. Manufactured from resilient, impactresistant, cross-linked polymer, the Volkswagen Amarok Frontier Tank offers incredible strength and rigidity and the UV stable plastic ensures it will not rust or corrode.

With a wall thickness of 8mm, the Frontier Tank is robust and is perfect for off road applications and is a must have for the Amarok tourer thinking about driving long distances.

Part number 3970030

Contact your local ARB store or stockist for pricing.

Long Ranger Tank

With the latest offering from Volkswagen coming in the form of a powerhouse V6 turbo diesel, it just begs to tow heavy and head off road. The Long Ranger has a new model to keep you travelling more and filling up less.

The high clearance model lifts the bottom of the tank approximately 30mm higher than the original factory tank, while still boasting a 50 per cent increase in fuel carrying. With around 120 litres capacity, the high clearance tank is a great choice for the hardcore tourer.

Part number TR76S

Contact your local ARB store or stockist for pricing.

EASY ESCAPE

The new ARB TRED Pro is the world's most advanced recovery board, utilising patented dual-composite EXOTRED technology for flexibility and strength as well as an innovative SIPE-LOCK design for positive engagement with the world's most popular off road tyres. Designed, developed and manufactured in Australia, TRED Pro recovery boards are the result of years of consumer feedback and in-the-field testing. They are made from a dual-composite material that provides flexibility across the board as well as incredible strength on the grip nodules that could otherwise be damaged by wheel spin.

The ARB TRED Pro is available in two exclusive colour schemes and is supplied with a premium leash with a neoprene handle. It can be mounted to existing recovery board mounting points or to TRED Pro-specific mounting brackets.



"41NPers rely on these boards to work and to perform"

UNIQUE DUAL-COMPOSITE MATERIAL

TRED Pro is manufactured from a unique dual-composite material and its manufacturer is so confident in its strength and flexibility that the product is covered by a lifetime warranty.

Recovery boards are usually damaged by wheel spin, which generates heat and can melt the grip nodules. An obvious solution would be to manufacture recovery boards from a harder and more resilient material, but they also need to be flexible in order to handle the weight of the vehicle and perform as intended. The solution is to manufacture using two materials.

"In the world of recovery boards, you need two materials, each with its own specific properties," explains Chris Roberts from Queensland-based Evolve Group, manufacturer of TRED Pro. "So that's how we created the EXOTRED."

EXOTRED is a dual-composite material with properties that make it ideally suited to use in a recovery board; the base material of the board is a flexible nylon while the grip nodules are manufactured from a hard-wearing glass-filled resin.

"It was a product that took a couple of years to get right," continues Chris. "But once we got it right, we were able to address the wear issues that affect other recovery boards and develop a board made from two different materials."

Manufacturing TRED Pro is a two-step process. "We make the nodules separately, then we fit them into the main recovery board injection moulding tool," explains Chris. "We then inject the main body of the material around those nodules and that fuses the components together.

"The construction method uses proprietary technology that we had to introduce into our injection moulding skillset and into this particular board itself."

While a solution could have been bolt-on grip nodules, Chris says they are simply not as strong, nor effective, as TRED Pro. "That bolt-on technology creates limitations in strength," he says. "We originally tried it and it didn't work. It just didn't perform how we wanted it to perform."

"4WDers rely on these boards to work and to perform," says Chris. "Something we like to say is 'explore with confidence', and we live and die by the fact that we want our customers to explore with confidence... for a lifetime with our product."

INNOVATIVE DESIGN

As well as TRED Pro's innovative dual-composite material, an exhaustive design process ensures the product provides the ultimate performance when it comes to vehicle recovery.

"It's not enough to just have great hard-wearing materials and flexible main boards," says Chris. "We also had to design something that was going to perform extremely well.

"What we did was overlay numerous different tyre patterns from leading manufacturers into CAD to create a product that was more engaging to the tyre in a recovery, which is ultimately what you want."

The result is SIPE-LOCK, which in combination with strategically positioned and angled nodules provides the best possible traction.

"TRED Pro's concave tip is designed to hug the tyre, giving it a round entry ramp and then as the tyre spins a little bit, it grips the SIPE-LOCKs and pulls the board down," says Chris. "SIPE-LOCK engages the water evacuation channels of the tyre and actually pulls the board down.

"The pulling effect wedges the board in between the terrain and the tyre, pushing more weight onto the board, which engages the nodules to give you more traction as you go."



- EXOTRED dual-composite construction
- Concave/convex design for easier recovery
- SIPE-LOCKs for ultimate traction
- Numerous mounting options
- 3 x ergonomically designed handles on each side
- Curved entry to grip tyre
- Pointed exit for optimum shovel performance
- Unique ARB colours
- ARB logos
- Premium leash in ARB safety orange





The shape of TRED Pro changes from concave to convex along its length, which is designed so the tyre can more easily pull the vehicle out of its predicament once momentum has been built up.

Another advantage of TRED Pro's innovative design is that nodules are not required on its back surface, which results in more compact stacking for storage and less chance of damage during recovery operations.

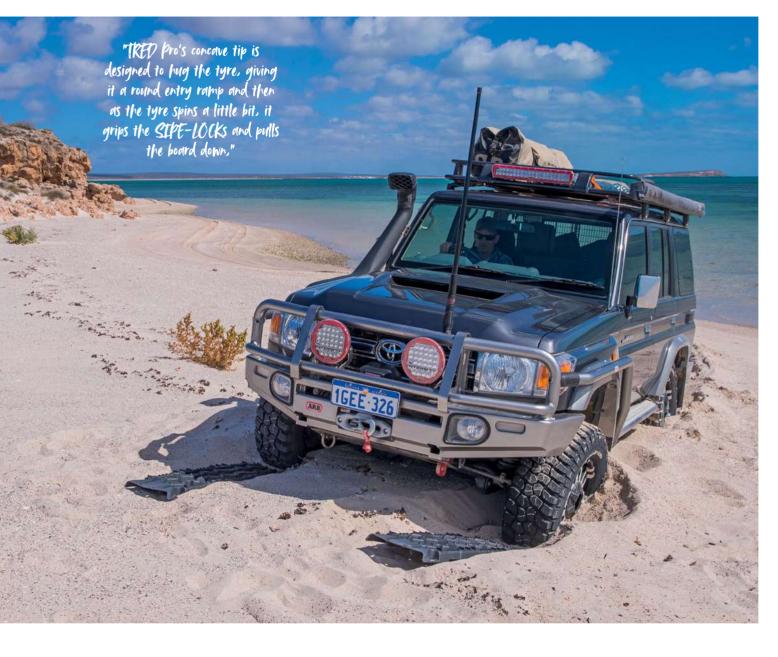
"The channels down the board itself provide grip as the board sinks into the terrain," says Chris. "They provide the grip as opposed to nodules on the bottom, which are susceptible to severe damage depending on the terrain... such as on rocky terrain or even in mud, which can also be quite harsh."

The exit end of the TRED Pro is pointed and is designed for shovelling. "We've opened up the end so that it's more flared out," says Chris. "It has more of a point on it so you can shovel larger amounts of dirt and debris and sand."

The TRED Pro also features ergonomically designed handles on each side as well as various holes for mounting and water drainage.

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TRED Pro





EXCLUSIVE TO ARB

The ARB TRED Pro is available in two colours: black on black and grey with orange grip nodules. It also features the ARB logo and is supplied with a premium leash.

The ARB TRED Pro retails for \$295 a pair and is available in ARB stores and stockists around the country.





WORKING WITH WATER CROSSINGS

When you head off road, you really need to be prepared.

When you're photographing an expedition to Cape York, the planning and preparation for looking after your camera gear takes things to another level. Most of the time, you just don't know what to expect. But one thing's for certain: there are plenty of water crossings.

In this edition's "Behind the Shot", we are at one of the many crossings that require extra care and preparation.

Typically, with these more difficult crossings, you line up the vehicles in procession. Each vehicle preferably has a water blind wrapped around the front plus a snatch strap attached to the recovery point at the ready, just in case. One by one, each vehicle approaches the water crossing and waits whilst a recovery vehicle sets itself up on the opposite side. Then, hopefully, they drive all the way through without any dramas.

Sitting in the driver's seat watching others get stuck and getting a little concerned about doing the same yourself can cause you to get a little stressed. So you might not simply drive through slowly and cautiously but instead give it a few extra revs for good luck.

Just like this guy who, when receiving the call over the radio, didn't hold back.

When photographing water crossings, sometimes you need to get in amongst it and get your feet wet. In a water crossing like this, I would position myself waist deep and just off the vehicle line to capture the action and maybe the drama during a recovery. The camera isn't waterproof so care needs to be taken with whatever you do here, ensuring you don't slip.

But I never expected this... nor the wave that followed.

Just as well this vehicle had a good snorkel and just as well I'm tall.

The vehicle made it through and although I was drenched, the camera gear was safe and relatively dry.

Michael Ellem, Offroad Images

Creating Tiny Worlds

Words & Photography by Michael Ellem – Offroad Images



ne of the best things about photography in the digital world is the ability to share to social media and get feedback almost instantly.

As well as being able to create great images with cameras and smartphones alike, you also have the ability to create interesting looks and effects, in camera, in post-processing or as you post the file to various social media apps.

It seems that most people nowadays post images and add effects to create a look that really grabs people's attention.

If you are interested in attention-grabbing images or simply doing something completely different, this is an opportunity to be super creative and have heaps of fun at the same time. A tiny world is basically a warped version of a panoramic image that appears to have been captured with a fisheye lens and the biggest selfie pole ever. There are many names for this... "tiny worlds", "mini worlds", "tiny planets", "globe photos", etc. but it's actually a form of stereographic projection.

Whilst this imagery is not new, nor something that I would be likely to use in commercial photography, it's a lot of fun and is accessible to anyone with a camera or a smartphone. You will need to use image manipulation software like Photoshop or one of the dedicated apps available specifically for this kind of imagery. (I recommend both iPhone and Android versions in this tutorial.)

So let's get into it.

LOCATION SCOUTING

For best results, look for objects that will project above the horizon and then move to a location where everything becomes balanced. As an example, locations where there are trees or buildings all around you, moving your position so that the trees south of you look a similar height to the trees east of you. This ensures that the projected images are well balanced around the centre. This is, of course, the case unless you would prefer to highlight an individual item, making it a feature.

It's easiest to take in the full 360 degrees. However, you can create images with panoramic shots of even 180 degrees, ensuring that you have enough sky in the image.

TINY WORLD WITH YOUR SMARTPHONE AND APP

iPhone users can download "Tiny Planets" from the app store or www.infoding.com/tiny-planet-photos

Android users can download "Planetical" from the Google Play store or https://apkpure.com/planetical/com.mnillstone.planetical

Once you have downloaded the app and taken your image:

- Add the image from your photo library into the app
- Create the conversion
- Rotate
- Zoom
- Compose
- Export and share

TINY WORLD WITH YOUR CAMERA AND COMPUTER

For this, you will need to create a set of images with enough overlap to successfully combine your panoramic images in Adobe Photoshop or Lightroom.

I advise doing this on a tripod and, even better, one with a panoramic head, ensuring you overlap each image. This will make it easier for Photoshop to stitch the images together.

If you use Lightroom, merge the images into a panorama as follows:

In Develop mode > Photo > Photo merge > Panorama

If you use Photoshop, merge the images into a panorama as follows:

Under File > Automate > Photo merge > Select the type of panorama

After you have merged the images:

- Take the file into Photoshop and convert it to a square:
 Image size > Unconstrained width and height link and then make the height equal to the width
- Rotate image 180 degrees:
 Image > Image rotation > 180 degrees
- Create your mini world:
 Filter > Distort > Polar coordinates > Rectangular to polar
- Retouch the corners and the join
- Rotate the image and zoom to preference

It's easier to create tiny world images on a smartphone but the detail and resolution from a set of images created on a good camera will be better for large prints.







Enuers 0.60

















ACHIEVING THE 'RABBIT HOLE EFFECT'

In Photoshop, select "Polar to rectangular" at the Polar Coordinates stage.

On your smartphone, select "Rabbit Hole" in the app.



EXTRA TIPS

- Look for lots of vertical elements sitting above the horizon (a clay pan with nothing on it would be a little boring).
- Try to ensure that objects don't exit the top of your original panoramic (the edit will look extremely strange).
- If you are not creating full 360 degree images, try to ensure that the sky area is similar left and right.
- Make sure that your horizon is level.
- Clouds are awesome but try to ensure that the top edge is clear of clouds because if they run into it, you might need to clean it up a little.

- Don't forget to try this on indoor settings... buildings with grand designs and tall windows can look fantastic.
- Just have fun with it but don't bombard people with this new image look, just post your favourite images.
- Make your own decision about the apps before you purchase and download as these are only my recommendations.

Don't forget to tag us in your images so that we can see your creations. #offroadimages @offroadimages

GOOUR OWN WAY

Words & Photography by Andrew George

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WHAT ARE THE SECRET INGREDIENTS OF AN AWESOME ADVENTURE?

You would have to start with an iconic destination, the means to get you there and the know-how to make it an unforgettable experience that you will want to do again and again. Well, they don't get much more iconic than Fraser Island. An Isuzu D-MAX or MU-X will do just nicely. And how about wellrespected 4x4 instructors and industry experts? With this perfect recipe, adventure awaits!



If you've recently bought your first 4WD or been waiting for the perfect opportunity to take your pride and joy off road, the Isuzu I-Venture Club could be what you're looking for. Just by owning an Isuzu D-MAX or MU-X you are considered a part of the club and you have the chance to take part in an organised, expertly-run trip. Now it's your turn to get out there!

The I-Venture Club program has been a huge success around the country. They decided to up the ante on the usual one-day trip and take eight eager first-timers to Fraser Island for four days of adventure, staying in style for two nights at the Kingfisher Bay Resort and one night at Eurong Beach Resort with all meals catered for. Expert driver trainers, various media outlets and TV shows were there to cover the new Isuzu vehicles in their element.

The barge trip from the mainland is just long enough to feed the excitement and ensure

we were as keen as mustard once we arrived. For many of the eight lucky Isuzu owners, this was their first taste of Fraser Island. Arriving at Kingfisher Bay Resort on the barge is a really easy option. Driving straight onto the jetty and the sealed roads throughout the resort makes getting around a breeze. Mind you, most places on the island are easy walking distance.

Our hosts were Dave from the Australian Offroad Academy along with Megan, Mark and Marcus from Isuzu Ute Australia. Brendan and Jax joined us, helping guide the groups around. I was along on the trip with the ARB D-MAX to help out and show firsthand the many ARB products available for kitting out an Isuzu. Over lunch, Dave gave us a run-down of how the day would play out and also an all-important dingo safety talk. Dingoes are one of the things Fraser is famous for and it is important everyone understands our responsibility towards them. Next on the agenda was an afternoon of practical driving tips to whet the appetite for exploring the island. This is what the trip is about, teaching the skills needed to handle the toughest terrain. We were able to utilise the purpose-built training track plus a few of the management trails within the resort boundary to take our guests through some of the tougher terrain types found on the island. Tyre pressure and gearing were critical topics covered during the afternoon. The group I was with were given a demonstration on ARB Air Lockers and how much of a difference they can make to the way you tackle differing terrain and how much control you then have over obstacles.

Day two of the adventure meant it was time to put into practice the skills learnt the day before. We set out to explore a few of Fraser Island's breathtaking locations, namely Central Station and Lake McKenzie. A visit to Central Station is an insight into the past life of Fraser Island's forestry operations. Fraser Island Travel





FRESH, CRYSTAL CLEAR, BLUE WATER AND WHITE SAND MAKE FOR A TRULY AWE-INSPIRING SIGHT... AND JUST WHAT THE DOCTOR ORDERED FOR OUR FRASER ISLAND ADVENTURERS.



It was once home to many houses and a school, built for the loggers' children. Mature trees planted nearly 100 years ago create a relaxed location for a picnic lunch. The drive to Lake McKenzie posed a few challenging spots for our newly skilled adventure seekers. However, they tackled it with ease, displaying the skills they learnt the day before. Lake McKenzie (or Boorangoora, its Aboriginal name) is arguably the number one destination on the island (maybe Eli Creek is up there also but that's an argument for another day) and a must visit for a swim and cool off. Fresh, crystal clear, blue water and white sand make for a truly awe-inspiring sight. The water was cool, refreshing and just what the doctor ordered for our Fraser Island adventurers. Later we headed back to the resort for some free time to relax and I could have easily had an afternoon nap but reminded myself that I was on Fraser Island, the sun was still up. I couldn't rest when there was still more adventure to be had.

So what better way to spend the arvo than a jetty fishing clinic run by a local fishing guide, Scott from Hervey Bay. The lucky ones had their efforts rewarded by catching a few fish, including some good sized flathead.

The sunset bar at the jetty, and the jetty itself, was a truly magical experience. I can say without hesitation that the cheese platter and drinks, combined with watching the sunset, were the perfect way to finish off the day's adventure.

We were up nice and early the next morning, ready to head off across the island and check out a few more breathtaking spots. Queensland National Parks regulations mandate that we travel in two groups as we had done the day before. Because we had so much distance to cover, our two groups would split up and travel to different spots.

Group one, led by Marcus and Jax, travelled the Southern Lakes through to Dilli Village for

lunch. On the Southern Lakes drive, the group visited Lake Birrabeen and Lake Boomanjin, both well worth the effort to visit and take a dip in. If the crowds of backpackers and day visitors that flock to Lake McKenzie turn you off, then a detour instead to either of these less frequented but still beautiful lakes will be your best bet.

The second group, led by Dave and Megan and including me, headed to the Valley of the Giants and onto Happy Valley for lunch. Do not be surprised if you haven't heard of the Valley of the Giants as it is a bit of a secret that is not marked on any maps. However, if you ask around when you get there, you should find a helpful local who will point it out for you. This was one of the last areas logged before a logging ban was placed on Fraser Island. To the keen eye, there are some remnant signs of buildings and markers in the area pointing to its past.

What is there now is an enchanted forest thick with growth. Given you are on the largest sand island in the world, it is truly remarkable that a forest like this has flourished. You will be impressed by how huge some of these trees are. Try seven adult arm spans round.

After lunch, both groups met up on the eastern beach for group photos and some filming. Having a convoy of that many vehicles travelling closely down the beach makes for great footage from a drone. Once we had all finished our media opportunities, we headed down to Eurong Beach Resort for our final night's accommodation. Not wanting to let a moment go to waste, Scott took some of the keen anglers of the group on a beach fishing clinic. After finding a suitable gutter, he handed over some secret tips before the lines hit the water. Unfortunately, the fish were off doing other things that afternoon, except for one that must've missed the memo. Nevertheless, everyone enjoyed the activity.

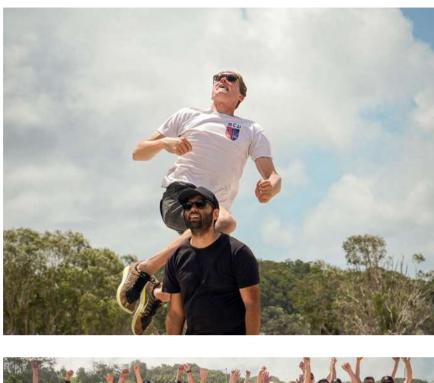
The remainder of us headed up to a few more of Fraser Island's iconic spots. On the way, we finally had our first dingo sighting with an older pup wandering along. What a special moment! Just a quick drive up the beach at low tide and we were at the wreck of the SS Maheno. In the late afternoon light, she was looking very photogenic. A short drive further up the beach we checked out the





GIVEN YOU ARE ON THE LARGEST SAND ISLAND IN THE WORLD, IT IS TRULY REMARKABLE THAT A FOREST LIKE THIS HAS FLOURISHED.







Pinnacles, the different coloured sands again looking mystical in the sunset. The sun was now fading quickly and dinner was calling our name, so we headed back to Eurong with a drive-by look at Eli Creek.

We all sat around while making the most of the buffet and shared our stories, pics and videos of the day's adventure. There was one particular video of a snake encounter, along the track through the Valley of the Giants, doing the rounds. Dave then asked everyone to charge their glasses and toast Martin and Rita on their 40th wedding anniversary. What better way to celebrate an amazing milestone than with a bunch of fellow I-Venture club members. Congratulations!

On our final morning, Dave led those that went fishing the day before on an early morning trip back up the beach to check out the spots we went to the previous afternoon. We all assembled in the carpark at 10.00am ready for our final drive back across to the western side of the island to catch the barge back to the mainland. The track conditions on the island were very favourable considering all the recent rain the island had received. It allowed plenty of time to pump up our tyres prior to going on the barge. Out came the ARB compressors, both on-board and portable, making the job quick and easy. I had several vehicles done in a short space of time, showing how valuable it is to have a top quality compressor on hand.

The I-Venture Club trips are an excellent example of a vehicle manufacturer not happy with just throwing you the keys to your new vehicle and saying, "See you later." They want to help and show you how to use your Isuzu D-MAX or MU-X for what it is meant for and in the right way. With idyllic locations and qualified instructors around Australia, there will be an event on soon somewhere near you to help build your 4x4 skills and make sure you're ready to go your own way!

Mexican Chicken Foil Bake



Ingredients:

2 packets (serves 2) Mexican chicken rice 4 chicken breasts 1 jar Mexican salsa Shredded cheese 1 jar roasted pepper strips 300g can corn kernels 400g can black beans ½ red onion, sliced 1 lime Aluminium foil

Method:

Preheat the camp oven. Lay out four square, doublelayered strips of aluminium foil. Divide the Mexican rice between each square of foil. Top each layer of rice with a chicken breast. Spoon approximately three tablespoons of salsa over each chicken breast and top with desired cheese.

Drain the jar of roasted pepper strips, can of corn kernels and can of black beans. Divide evenly between each foil square. Top with sliced red onion.

Cut four more aluminium foil squares and create parcels by laying each square on top and rolling up sides to enclose. Carefully place in preheated camp oven.

Arrange some coals just outside the fire, place camp oven on coals, cover with lid and scoop a shovelful of coals on top. Bake for 30-35 minutes or until chicken is fully cooked through, swapping order of parcels if stacked in camp oven to ensure top and bottom parcels do not burn. Serve with a wedge of lime.

Serves four hungry campers.

Cookies and Cream Fudge



Whilst recently touring Australia's Northern Territory, ARB's 4x4 Culture editor, Jessica Vigar, was approached by a group of young sisters. These off road entrepreneurs, with the help of their mother, had been making fudge in their caravan and were selling it to surrounding campers. What a wonderful activity to keep young minds busy (especially on those unforeseen rainy camping days). Here is a recipe that shows just how easy this afterdinner treat can be.

Ingredients:

400g can sweetened condensed milk 2 pack of Oreo cookies (275g) 350g white chocolate melts Baking paper

Method:

Line a 21cm square baking dish with baking paper. If you don't have a baking dish handy, any container of similar size that is wide and shallow and that can fit into your camping fridge will do.

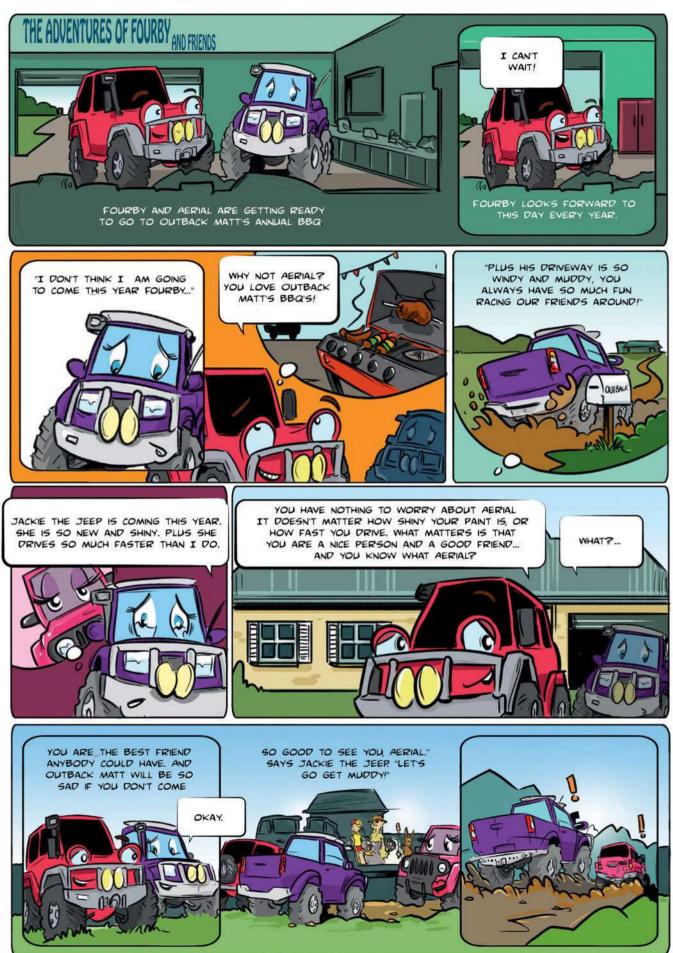
In a small saucepan, heat the condensed milk and add the white chocolate, stirring until melted. Remove from heat.

Place all but four Oreo cookies into a zip lock bag or folded clean tea towel. Break into large chunks (around quarters and eighths in size). Mix the broken biscuits into the chocolate mixture and pour into the prepared container/tray.

Take the last four Oreo cookies and, in the same bag or tea towel, crush into crumbs. Sprinkle over the top of the fudge and gently press into mixture with the back of a spoon.

Refrigerate for at least an hour. Cut into 25 pieces.

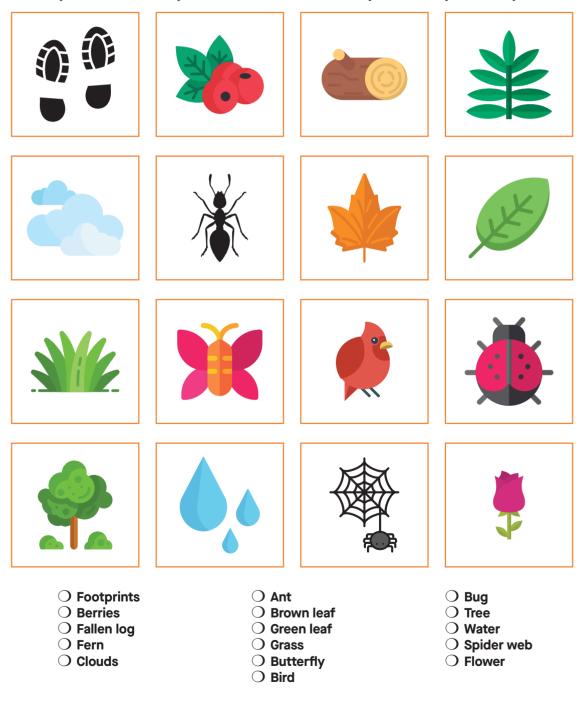






NATURE SCAVENGER HUNT

On your next holiday adventure, see how many of these you can spot!!



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SOFT CONNECTION



Staying safe off road is paramount, especially in a recovery situation. Having the right, correctly rated gear is vitally important in ensuring the safety of your family and friends within your vehicle.

ARB's new Soft Connect Shackle is the latest addition to the already comprehensive recovery lineup. Manufactured from ultra-high molecular weight polyethylene high tensile CE certified rope, the ARB Soft Connect Shackle provides flexibility in attaching your strap to a vehicle-rated recovery point connection. Rated at 14.5-tonne breaking strength, the ARB Soft Connect Shackle is engineered to float in water, be resistant to short-term UV radiation and provide superior strength. The shackle is encased in a Hypalon sleeve. Hypalon provides excellent resistance to protect the rope from cuts and abrasions. It is also easily replaced if it becomes damaged in a recovery situation.

The soft shackle connection is formed by passing the large ball end knot through the open loop, tightening like a noose when used and pulled hard against the large formed knot.

Protecting and storing your ARB Soft Connect Shackle when not in use is easy with the included drawstring carry bag. The bag incorporates mesh and nylon to allow for sufficient drying as well as protection and easily stores away in your recovery kit.

Part number ARB2017 RRP \$55.00

GME GOES PINK



GME has recently partnered with the McGrath Foundation and, as part of this arrangement, released a range of limited-edition McGrath Foundation co-branded products. 10 per cent of the sales of these products will go directly to the McGrath Foundation to assist in their tireless efforts. The McGrath Foundation is a breast cancer support and education charity that raises money to increase breast health awareness, place regional Breast Care Nurses and support families in communities across Australia. McGrath Breast Care Nurses help individuals experiencing breast cancer and their families by providing physical, psychological and emotional support. From the time of diagnosis, and throughout treatment, this invaluable support is available for free.

Warwick Clancy, Managing Director of Standard Communications (GME), said "We are overjoyed to join the McGrath Foundation as a corporate partner. The McGrath Foundation, with the efforts of their Breast Care Nurses, has helped over 50,000 families across Australia to date. Each of us has been touched by breast cancer, whether through a loved one or through someone we know, and we are pleased to be supporting not only the McGrath Foundation but also families in regional and rural areas." As part of the partnership, GME will release limited edition McGrath Foundation co-branded products with 10 per cent of each product sold being donated to the tireless efforts of the McGrath Foundation and their dedicated Breast Care Nurses.

Tracy Bevan, McGrath Foundation Ambassador and Director said, "We're thrilled to welcome GME as our newest partner. GME's incredibly generous support will help the McGrath Foundation raise funds to place McGrath Breast Care Nurses in communities across Australia, helping make life that little bit easier for families experiencing breast cancer." The corporate partnership is part of GME's ongoing commitment to the communities in which they are present.

GMD

ON THE SPOT

GME has developed an app, heralding a new era for UHF CB radio.

A new app developed by Australia's world-leading UHF radio manufacturer, GME, allows users to send, receive and display their GPS location with each transmission.

Called XRS Connect Location Services, the app utilises the Bluetooth capability of GME XRS-model UHF radios, which can connect to Apple and Android smartphones and tablets.

"GME is the only manufacturer with Bluetoothenabled radios," says GME Product Manager Tony Crooke. "The Bluetooth is the bridge between the radio and the phone, which then enables smartphone applications on the radios."

"This is an app that people will use quite often. It allows users to see where other UHF users are, so they can track their location and determine who is who." Thanks to XRS Connect Location Services, users are able to send, receive and display a short text "status" on the tail of transmissions, selecting from either pre-defined or userdefined statuses, of up to 32 characters.

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XRS Locate

"You get on the radio, you hit the PTT button and that will transmit your location with the voice over the UHF band," explains Tony. "Then the person on the other end (assuming they have an XRS radio connected as well) will see a display of the location they're receiving that transmission from... and it will give a compass direction and distance on the handset and on the phone or tablet."

Essentially, the app allows a user to see where a transmission is coming from, clearly displayed as a pin on a map on the connected mobile device. And the XRS Connect Location Services app allows maps to be downloaded and stored on a



ESSENTIALLY, THE APP ALLOWS A USER TO SEE WHERE A TRANSMISSION IS COMING FROM, CLEARLY DISPLAYED AS A PIN ON A MAP ON THE CONNECTED MOBILE DEVICE.

device, ensuring accurate map display in offline areas.

"It can be used where there's no mobile phone coverage," explains Tony. "The GPS in your phone works anywhere in the globe as long as you've got the signal from three satellites to give you a position fix. However, the mapping is provided over cellular data, so that's where the offline mapping comes into play. Through the app, you can select an offline area before you leave the coverage area and you can download it and cache that map within the app." XRS Connect Location Services also allows users to save an unlimited number of Points of Interest (POI). "You can create POIs by clicking and holding on the map," says Tony. "A freeform text box then comes up and you can call it whatever you want, which means you can navigate back to it."

"For 4WDers, say you stumble upon a beautiful waterfall somewhere and you want to go back to it. You can punch that in as a POI, then if you click on that POI, it'll give you GPS coordinates so if you've got the likes of a Hema Navigator, you can then plug the coordinates in and you can navigate to that POI," says Tony.

The XRS Connect Location Services app is ideally suited to those travelling in convoy, as it allows users to choose their own "tag" for easy identification and tracking of multiple users. Custom groups can also be created for easy management of contacts. "You can add your friends to a group so the radio app will only display your friends rather than everyone who's got an XRS radio," adds Tony. GME XRS-model radios will communicate with any other UHF radios, no matter the brand, but to receive location information through the XRS Connect Location Services app, other users will also need an XRS-model radio.

There are two GME XRS Connect models to choose from. The top-of-the-range GME XRS-370C XRS Connect Compact Hideaway UHF CB radio retails for \$549 and the GME XRS-330C XRS Connect Super Compact Hideaway UHF CB radio retails for \$499.

For those who need portability rather than a fixed-mount radio, GME also offers the XRS-330CP XRS Connect Portable Pack, which is supplied in a carry case and comes with a suction cup mount, 12V accessory lead, 2.1dBi magnetic antenna and all mounting hardware. It retails for \$529.

Smart D-MAX



n early 2017, Isuzu released their new D-MAX, offered in either a wide or narrow body design with the 4x2 vehicles having additional low and high ride options. The team at SmartBar has now finished development on a new frontal protection system styled to accommodate them all.

The latest application of SmartBar's Vehicle Frontal Protection System complements the design and shape of the vehicle, whilst maintaining the D-MAX's contour lines and aesthetics. The SmartBar maintains all of the factory accessories while providing unparalleled safety. Utilising advanced design capabilities and a hollow polyethylene construction, the innovative SmartBar has been developed to provide users with an excellent vehicle protection option without a significant increase in gross vehicle mass.

Made in Australia, SmartBars are easy to install, airbag compatible, available in both winch and non-winch variants, come supplied with two aerial points, durable LED parker/indicator lights and have mounting provision for driving and fog lights.

Contact your local ARB store or stockist for part numbers and pricing.

GONE ROGUE





ingsley's gone rogue, engineering a robust side step that offers an alternative to the traditional alloy step boards. Kingsley Rogue Side Steps offer a tough body-mounted step, made from a heavy-duty steel construction with heavyduty steel brackets. The step is coated with a high-grade polyester powder coat in a textured matt black finish for an on-trend look, not to mention the functional benefit of easier access into the vehicle and better reach to the vehicle roof.

Each Kingsley Rogue Side Step has been engineered in Australia to the specified vehicle to ensure a perfect fit and airbag compatibility. The step pad design features an aggressive configuration to ensure a perfect grip, no matter the conditions: dirt, snow, dry or wet. Step pads are bolted on for easy removal if a detailed clean is required.

The Rogue Side Step offers vehicle protection from stones, mud or whatever else the wheels throw up, protecting your vehicle from damage as the step covers the whole length of the vehicle sill. With more applications being developed, currently the Rogue Side Steps are available for the following dual-cab models:

- Ford Ranger PX/PX2
- Mazda BT-50 2011 on
- Nissan Navara NP300 D23 2015 on
- Mitsubishi Triton MQ 2015 on
- Holden Colorado RG 2012 on
- Isuzu D-MAX 2012 on

Kingsley Rogue Side Steps are backed by a 3 year warranty.

Contact your local ARB store or stockist for part numbers and pricing.

Century Batteries launches the first dual-purpose 4x4 battery designed and manufactured in Australia for Australia.

DUA

The Century Overlander, one of Australia's most popular batteries for 4WDs, has undergone a redesign to become the battery of choice for true heavy-duty off road vehicles. While most standard 4x4 batteries are purely designed as a starting battery, the new Overlander 4x4 is a dual-purpose battery combining starting and semi-cycling capabilities.



Today's modern 4WD vehicles demand a lot from the starting battery, not only the power to start the engine but also to run essential 4x4 accessories such as CB radios, spotlights, GPS and more. This isn't what a starting battery is designed for and it can cause serious damage, inevitably reducing the life of the battery.

In off road conditions we require even more from our battery, especially while driving at low speeds in rough terrain and using essential accessories such as winches. These accessories draw power from the starter battery and if you're driving slowly, chances are the battery won't be getting enough charge back from the alternator. Ultimately, this will drain the battery, possibly leaving you stranded and causing serious long-term damage to the battery. The secret behind the new Overlander 4x4 battery is the hybrid technology design incorporating both calcium and antimony plates, producing dependable starting power plus added semi-cycling capabilities. This allows the battery to handle the discharge from additional accessories without damaging the internal components and affecting the overall life of the battery.

Batteries in 4x4s can be subjected to pretty torrid conditions; not just extreme hot and cold temperatures but endless corrugations and bumps, which can create havoc for batteries, attacking critical internal components and leading to early battery failure. Century has addressed this with thicker, full-frame cast plates improving the strength and durability of the battery. Additionally, the Overlander has Century's exclusive Platelock Technology, which is an adhesive that binds the battery plates securely together to provide superior vibration and impact resistance. This is a vastly different construction to your normal car battery and essential if you want reliable power in your 4x4 in rough terrain.

All claims about the Century Overlander 4x4 battery have been tested at 75°C. This is much hotter than the universal battery standard of 40°C and a far more realistic under-bonnet temperature for 4x4 vehicles operated in Australian conditions.

The Century Overlander 4x4 battery is made and engineered in Australia especially for our climate and conditions. For more information on the Overlander 4x4 battery and the full range of Century batteries, contact your local ARB store or stockist.

BATHING



With 270 degrees of shade and a massive 11m² coverage, Rhino's Batwing Awning is the perfect addition for any adventure.

FEATURES:

- UV50+ sun protection and Cancer Council endorsed shade
- 270 degrees of shade and 11m² coverage area (118 square feet)
- Rare earth neodymium magnets lock poles into place
- Ultra durable lightweight 210D poly oxford water resistant PU2,000mm (UV50+)
- Black powder coated poles and frame for a sleek look
- Easy to grab Rhino-Rack zips
- 580gsm black PVC outer bag
- Drop-down poles integrated into the awning, no more separate leg bag
- Integrated peg and rope pocket
- Rhino-Rack branded Pick Up Point to tie off the awning to your roof rack

- Moulded foot, enabling two pegs for added wind resistance
- Fits all Rhino-Rack and Thule roof racks with specific fitting kits

INCLUDES:

2x Multi-fit bracket + hardware, 10x pegs, peg bag, 8x guy ropes (4 with hooks), 2x spare hinge knuckles

COMPATIBLE ACCESSORIES:

- Extension Piece
- Tapered Extension
- Tagalong Tent

Cancer Council Endorsement

For each sale of a Batwing Awning, Rhino will donate funds that go towards assisting the Cancer Council with all the great work they do in the community through cancer research and related support services.

Remember, shade does not provide 100 per cent protection. Some of the sun's UV can still reach you in the shade by reflecting off surrounding surfaces. As a rule of thumb if you can see the sky, you are less than fully protected so always combine shade with clothing, a hat, sunglasses and sunscreen.



Get Social

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Join the hundreds of thousands of people already a part of ARB's evergrowing online community.

Post photos, ask questions, get information, enter competitions and take part in our debates on all things four wheel driving. Plus, you'll be among the first to see our new products and even get a behind the scenes look at ARB.







You

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arb4wd

arb4x4

arb4x4

How to Avoid Racking Up Fines

A short guide to rear-mounted bike racks for your car

In this issue, we are looking at various rear-mounted rack designs as well as bike rack laws around the country. In Australia, each state has its own roads authority and state regulations when it comes to bike carriers. The majority of legal requirements in respect of rear-mounted bike carriers focus on the numberplate of the vehicle being visible from a set distance. This is crucial to keep in mind when fitting bike racks and transporting bikes.

As a world leader in bike racks for cars, Thule ensures all platform bike carriers fulfill legal and safety demands to make sure your bikes will be carried safely and securely wherever you want to go.

Whether it's just you or a carload of family and friends, there's nothing like getting outdoors and taking your bike on a ride with the kids or family. The driver must remember that the transportation of bikes has to be done with safety measures in mind. Now let's take a look at the rough requirements for bike carriers on a state-by-state case around Australia:

New South Wales (NSW)

Road and Maritime Services - www.rms.nsw.gov.au

According to New South Wales Police and the Road and Maritime Authority, if the bikes or rear-mounted racks obscure the rear number plate of the vehicle, then the car must be fitted with an "auxiliary" numberplate. These numberplates show the same number/ lettering combo as your car's plate and can be purchased through the myplates website or in person at an RMS service centre. It is also recommended to avoid using bike carriers on vehicles obscuring both stop lights and indicators.

Victoria (VIC) VicRoads www.vicroads.vic.gov.au

Similar to NSW, drivers in Victoria are required to ensure the numberplate, spotlights,

indicators are visible from a distance and not be obscured by either the bike racks or the bikes themselves. The recent changes to regulations by VicRoads allow drivers in Victoria to drive with empty rear-mounted bike carriers. For more information visit the VicRoads website.

Queensland (QLD)

Department of Transport and Main Roads - www.tmr.qld.gov.au

Like all states, when driving on the road, a numberplate must be fitted and visible. Often referred to as the "accessory plate" by Queenslanders the plates are attached to the rear-mounted bike rack. According to the Road Authority website, if no bikes are being transported then racks must be removed for driving.

South Australia (SA)

Department of Planning, Transport, and Infrastructure ww.dpti.sa.gov.au

In South Australia, drivers are required to purchase a bike rack numberplate as the bikes might obscure the bike rack and



therefore, the numberplate. These plates have the same registration number as your vehicle and cannot be interchanged. Drivers can either take the rear numberplate off the vehicle and attach it to the bike rack or they can display a bike rack numberplate on the bike carrier itself. Drivers are also required to ensure that the numberplates are illuminated during periods when visibility is poor such as sunrise and sunset. It is also recommended to add additional brake lights where the vehicle's brake lights are not visible from a distance of 200m.

Canberra (ACT)

Transport Canberra and City Services - www.tccs.act.gov.au

In Canberra, bike racks can only be attached to vehicles for purpose of transporting bikes. Again, like all states, the numberplates should be visible and therefore the driver requires having a bike rack numberplate.

Northern Territory (NT) Department of Transport transport.nt.gov.au

Drivers in NT are required to ensure the numberplates, indicators, stoplights are

visible at the time of using a rear-mounted bike carrier.

Tasmania (TAS)

Department of State Growth Transport - www.transport.tas.gov.au

Like in all states, drivers must comply with local road and safety rules. Numberplates and rear lights must be visible from a distance while using a rear bike carrier.

Western Australia (WA)

Department of Transport - www.transport.wa.gov.au

Auxiliary plates are required for drivers in WA when using rear-mounted bike racks. The aim of this article was to give you a general guide to different laws associated with bike racks and a few options for consideration when buying rear-mounted racks for your bikes. You should, however, confirm the relevant road regulations in regards to you travel location and your particular vehicle. Here are some products that would allow you to safely carry your bikes to any destination and yet benefit from smart features while not in use, such as having access to your car's boot thanks to the smart foot pedal tilt:

THULE EASYFOLD XT

Carry Up to 3 bikes The fully foldable, compact, and easy-to-use towbar-mounted bike rack for all types of bikes. Fully operational lights and illuminated numberplates.

THULE VELOCOMPACT

The best compact and lighweight bike carrier for everyday use. Fully operational lights and illuminated numberplates.

THULE EUROWAY G2

Carry Up to 3 bikes Exclusive, comfortable and very ight towbar-mounted carrier. Fully operational lights and illuminated numberplates.

THULE 976AU REAR-MOUNT LIGHT & NUMBER PLATE HOLDER

Recommended for HangOn style rear-mounted bike racks. Substitutes the most important rear lights on your car.

Competition Winners



This is Aweeesooome!! - Josh Lynch, Warranwood VIC



Our recent trip to the Big Red Bash in Birdsville. This was our last trip as a complete family and bucket list wish for my wife who passed away from cancer at the age of 37 – Rob Baumann, Kapunda SA



4 year old Jack Bowles with his first ever catch – Mark Bowles, Woods Point VIC

LITTLE TACKER

Competition Winners

We asked for a pic of your little tacker enjoying the off road life and loved the shots you guys sent through. Here are this edition's winners. Each published photo wins an ARB Medium Cargo Gear Stormproof bag and Fourby Plush Toy worth \$96.00!





Abigail checking out the view while keeping her socks clean on Duck Creek Road – Michael Pearson, Jimboomba Qld

Did I hear photo Competition..? – James Whittle, Lyons NT



Allison Summers, Delegate River VIC



Playing in the sand pit - Neil Barry, Stretton QLD



To the top of the world - Heath Wright, Inverell NSW

BEARD BRAG

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Competition
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Send us a pic of your most epic holiday beard for your chance to win an ARB winter camping pack. Not just a competition for the men, ladies, get creative!

ARB winter camping pack contains an ARB Camp Mug, ARB Thermo Flask, pack of two ARB Off Road Socks and ARB Beanie. Total cost \$84.00! Make sure you include a caption, your name and address. Email promotions@arb.com.au



Competition closes 31st May 2018

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Dandenong	(03) 9793 0002
Echuca	(03) 5480 2600
Geelong	(03) 5272 2611
Hoppers Crossing	(03) 9749 5905
Keilor Park	(03) 9331 7333
Kilsyth	(03) 9761 6622
Pakenham	(03) 5940 5500
Shepparton	(03) 5822 1877
Somerton	(03) 9460 9988
Traralgon	(03) 5174 9190

SOUTH AUSTRALIA

Elizabeth	(08) 8252 1599
Morphett Vale	(08) 8186 6101
Regency Park	(08) 8244 5001

(02) 6280 7475

ACT

Fyshwick

NEW SOUTH	WALES
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Alt	oury	(02) 6021 2477
Art	armon	(02) 9438 4484
Bro	oken Hill	(08) 8087 9250
Bro	ookvale	(02) 8507 3073
Du	bbo	(02) 6885 5777
Mo	oorebank	(02) 9821 3633
Ne	wcastle	(02) 4953 9555
Or	ange	(02) 6369 0700
Pe	nrith	(02) 4731 1266
Po	rt Macquarie	(02) 6581 2500
St	Peters	(02) 9565 2455
Ta	mworth	(02) 6762 0541
Th	ornleigh	(02) 9980 8855
Wa	agga Wagga	(02) 6925 8777
We	entworthville	(02) 9631 7889
WESTERN AUSTRALIA		
Ca	nning Vale	(02) 9455 4366
		(

Canning Vale	(02) 9455 4366
Geraldton	(08) 9921 8077
Mandurah	(08) 9583 3200
Osborne Park	(08) 9244 3553
Wangara	(08) 9409 5764
Welshpool	(08) 9358 3688

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(07) 4153 2929

(07) 5535 9223

(07) 5499 1955

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(07) 4035 3350

(07) 5491 4500

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(07) 3715 6400

(07) 3266 3255

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